

# BULLETIN

OF THE  
HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 36

Entered as second-class matter, September 28, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

Jan. 1914

ASHEVILLE opens wide her doors to the sick and the well from every clime, but she demands that the sick shall so comport themselves that they shall not become a menace to the health of her citizens or the stranger within her gates.



The school should be an institution where methods are taught for saving and preserving the child, for making him a healthy educable child, one who will bless the State with the highest type of citizenship. May we not hasten a reform which will make the school a place where the teachings of sanitation are put into practice and not a center for exchanging and spreading all kinds of filth-borne diseases?—Marcus A. Dow.



Childhood is the time for effective treatment of physical defects, and the school is one place where every individual can be reached.—U.S. Bureau of Education.



One of the unlimited educational possibilities of health boards consists in their privilege to point out repeatedly and cumulatively the industrial and community benefits which result from habits of health, and the industrial and community losses which result from habits of unhealthy living.—U.S. Bureau of Education.

HENDERSONVILLE, N. C.



R. F. D. NO. 2.

MR. A. S. EDNEY,

## Health Department City of Asheville

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L. B. McBRAYER, M.D., Health Officer, Phones:  
Residence. 124; Office 1526.

W. H. BIRD, Sanitary Inspector, Phones: Residence, 374; Office, 152; Stable, 294.

L. M. McCORMICK, Meat and Milk Inspector,  
Chemist and Bacteriologist, Phone 152.

ERNEST ISRAEL, Sewer and Plumbing Inspector.

W. FRANCIS, Water Superintendent.

**Population** { White - 15,000 } **20,000**  
 { Colored - 5,000 }

## WHY NOT HAVE MEDICAL INSPECTION OF SCHOOLS IN ASHEVILLE?

The answer by those in authority will just be, we have not the money, but the people of Asheville cannot take that as an excuse. We have money to enlarge our school buildings and employ more teachers and buy more land, and various and sundry other things connected with the increase of the school population every year in Asheville. But you answer, Our treasury is overdrawn. We owe much money. The school board never has as much money as they need and can use to advantage. Why certainly, everyone of those statements are admitted, but whenever does a school board expect to be out of debt? Whenever do they expect to have all the money that they can use to advantage in our public school system? I answer never. Then if we are never to be out of debt, if we are never to have a surplus you would not think of asking us to wait until you did have a surplus or until you are out of debt, to establish a thing that is as much needed as school inspection—certainly not.

A man who has a leak in a water pipe that will cost him \$5.00 to repair cannot afford to say that he cannot have it repaired because he hasn't the money or because he is in debt. If the leak is allowed to remain it will probably cost him \$5.00 every month or maybe \$10.00 or \$25.00 every month while in the beginning one \$5.00 would stop the leak and also the expense. The plea that we haven't the money to start school inspection parallels the man with the leaking water pipe.

There seems to be nothing except cold dollars that will appeal to the majority of people in this day and from that standpoint alone school inspection is necessary and should be demanded by the people of the city for economic reasons.

The County Health Officer, Dr. D. E. Sevier, inspected in the County schools during the month of December 553 pupils and of these 40% were defective. 27 of them had defective hearing and 37 had defective vision, a total of 64 or 12%. Good vision and good hearing are two things that are absolutely necessary in order that a child may take advantage of the opportunities for education offered in school.

Now there are no reasons why the children living in Asheville should be healthier than the children in the country. In fact, there are many reasons why they should not be as healthy as country children. With the same rate of defectives that Dr. Sevier found we would have 1,600 children among the school children of Asheville with defects. We would have 440 with defective vision or hearing. Now if the 1,600 children should lose one year out of the seven up to the beginning of high school, and that is a very conservative estimate, it would mean the same as 230 children going to school for the entire seven years, and this would require at least six teachers. The salary of the six teachers would probably amount to \$3,000.00 per year. This doesn't take into consideration the provision of six rooms and the necessary heating, janitor



service, repairs and incidental expenses of six rooms for seven years.

A good medical inspector and a good school nurse can be had for \$2,500.00 per year, which would be a saving in salary of \$500.00 per year and the expenses of the six rooms, janitor service, fuel, incidentals, etc., would certainly amount to another \$500.00 a year, making a total cost of \$1,000.00 per year or \$7,000.00 for the seven years saved by the medical inspection. Then there is the added cost to the parents of this loss of time, and may we add the loss to the city and state by the failure of the children to receive the education they ought to receive and are entitled to receive during the time they are in school. For these children find it difficult to keep up with their grades become discouraged easily and probably quit their education earlier than they otherwise would.

Don't forget that this annual loss of \$1,000.00 like the leaking water pipe goes on forever. Let us introduce school inspection and a school nurse into our public schools and stop this constant leak. We can no more afford to wait until we have the money or until we are out of debt, than the owner of a house in Asheville can afford to wait to stop the leak in his water pipe.

The above doesn't take into consideration the value to the child, but simply the saving of dollars to the school fund. Certainly the improvement of the health of the children of the city and the prevention of some serious diseases should appeal to the sentiment, philanthropy and good judgment of every citizen of Asheville.

### MEDICAL INSPECTION AS AN ECONOMIC PROPOSITION

Medical inspection, therefore, becomes a business proposition. In a typical community with 250 children, for instance, a saving in the promotion rate of 10 per cent, if the children complete the eight grades on time, will be 175 years of schooling, representing an annual saving of \$5,250.00 at the rate of \$30.00 per child

per year. The school plant needed for the accommodation of the children would be decreased \$17,500.00.

Here are some facts as to the need of medical inspection and what has been accomplished when adequate medical inspection has been established:

1. In contagious diseases. It can be shown that in places where a thorough system of medical inspection has been established, the number of cases of diphtheria has fallen off two-thirds, and scarlet fever five-sixths.

2. In noncontagious diseases. Medical inspection eliminates a large proportion of the physical defects that have been proved to retard advancement through the grades. The fact to be made clear is that failures of promotion are a large and positive force in increasing the cost of our schools, and that medical inspection will reduce the number of these failures; in other words, medical inspection has a direct bearing upon the reduction of school expense. *The initial cost is more than saved from the lowest standpoint of dollars and cents.*

Too great emphasis can not be given to the value of a public presentation of the needs and benefits of medical inspection, in written reports or otherwise, before asking money for adequately doing the work. A discussion of the financial aspect of the case appeals to the practical men usually composing the councils which fix the budgets or the communities which decide upon items of expenditure. A plan should be presented, giving an estimate of cost.

Those striving for the introduction of medical inspection should always present a well-thought-out plan. The following is suggested: (a) A daily inspection for contagious diseases; (b) an annual physical examination of each child; (c) a system of following up the parents to see that the children have the proper treatment; (d) team work in co-operation of teachers, janitors, principal, and superintendent, with the physical director, school nurse, and medical inspector in the various phases of school hygiene.



This work should be done by: (1) The room teachers, who make the vision and hearing tests, and can be taught to select children to be referred to the inspector on his daily rounds. These include: Children suspected of illness; children returning after unexpected absence; and those returning after having been excluded. (2) Medical inspectors acting under the general direction of the superintendent of schools or of the director of school hygiene, (a) calling at each school as near the opening of the morning session as possible for the purpose of examining cases referred to them by teachers; (b) once a year examining each pupil and recording the facts on a card for future reference. This could be done at any time in the day, and would take ten to fifteen minutes for each pupil.

Such an examination is fruitless without a system of records and the machinery for following up the cases needing attention. The inspector should diagnose cases, not treat them. The parents must provide the treatment. Experience has shown that some parents will heed printed notices, but that many require a personal explanation, and that some need to be shown how.

*This has led to the introduction of the most indispensable factor, namely, the school nurse.* The doctor visits for a few minutes, whereas the nurse devotes her entire time to the work. She is the most important feature of the whole plan. Her duties are briefly these: To aid and advise the teacher in her work and to act in emergency cases until the doctor arrives; to follow up children excluded on account of minor contagious diseases, such as scabies, impetigo, pediculosis, and ring worm; to visit the home and confer with the parent, either showing her how to treat the case or influencing her to put the child under the care of a physician.

The nurse is the most efficient link between the home and the school. Her work is immensely important in its direct results and very far-reaching in its indirect influences.—Alfred B. Morrill's address before Fourth International Congress of School Hygiene.

## CHILDHOOD IS THE TIME TO CORRECT DEFECTS

If a child is threatened with illiteracy, millions of dollars are forthcoming for its education, but the child that is threatened with preventable disease is told: "Just now nothing can be done; wait until disease has attacked you and you are helpless. Then there is a hospital provided for you and you will be taken there, and an attempt will be made to save your life." What we need to emphasize constantly is that it is not the curing of disease that is important, but the prevention of disease. Where one life may be saved by appropriate treatment a thousand lives may be saved by timely preventive measures.

## A SCHOOL CHILD NEEDS A CLEAR MIND

Education has begun once more to come into her own by including bodily features, and all that belong thereto, so hygiene, or the science of well-being, must always be thought of in terms of the mind as well as of the body. And as we ascend in the scale of human values and cultural sensitivity, hygienic education demands the exclusion of all morbidities, self-consciousness, false motives, fears, envies, angers, all emotional neuroses, all disordered attentional habits, all deranged associational processes, every clogged or explosive act of will and inconsistency in thinking, until the best functioning of mind as well as body is the common attainment of our children.

## SCHOOL LUNCHES

We congratulate the Superintendent of Schools and the Board of Education on establishing a system of serving hot lunches at the High School building. This is wise and proper and is, of course, very much better than any cold lunch a child can carry from home, and the way the children at one time came up town and bought trash, etc., is not to be considered. However, as a matter of fact it is probable that this doesn't serve the school child that most needs it. These children, everyone of them, are amply



able to take a good lunch from home or buy one as they are doing at the low rate made by the School Board, but there are a considerable number of children attending the public schools in Asheville, in other school buildings, that perhaps do not have enough to eat when they are at home and they are the ones that most need a good hot lunch at school. I hope in the near future it will be possible for the School Board to meet this need.

The following from the U.S. Bureau of Education is pertinent:

The question of permanent connection with the school organization enters into another interesting hygienic movement, that of school feeding. The free breakfast and lunch, in the open-air schools, or the "penny luncheon," elsewhere in the school system, is usually justified by its advocates on one or all of the following grounds: (1) Humanitarian—the children need it; one-tenth of the school children suffer from malnutrition; (2) public policy—the pupils do better work when better fed; (3) medical—diet is the first essential in treatment in the open-air schools; (4) economic—the children get more for their money in the school lunchroom than on the street; (5) educational—the children learn valuable lessons in nutritive values.

### A TRUANT OFFICER OF THE NEW GENERATION

The present generation of adults probably remembers with mixed feelings of pity and disgust that ogre of childhood known as the truant officer. Imagine a truant officer interested in the physical defects of children, their home environment and mental capacities. Yet it is by investigating just these phases of child life and making the readjustments which they suggest, that the problem of truancy is being solved today. And lately truant officers have been using the confidential exchanges in their communities to learn the history of each truant's family so far as it has come into contact with relief agencies.

A dozen visiting teachers in New York

use the social service exchange in making intensive studies of the many truant and backward children in their care. In Worcester, Mass., the school attendance officer, who is a city employe, registers in the confidential exchange. Here are some of the things she was able to do last year:

"A small boy who was supposed to be very deaf, upon examination was found not to be deaf but so defective mentally that he was unable to comprehend what was being said to him.

"It has been made possible for a boy who cannot walk well and has the use of only one hand to enter a school for crippled children where he will be taught to be self-supporting instead of becoming in time a public charge.

"A bright girl who has never been able to attend school because she could neither hear nor speak, has been referred after examination and a slight operation, to a school for the deaf, thus giving her a chance to receive the education she would not otherwise have had.

"Several children suspected of having incipient tuberculosis have been carefully examined by physicians and through the co-operation of Memorial Hospital and the Children's Friend Society have been sent to the country to be made stronger and more ambitious."

### SCHOOL INSPECTION IN OTHER STATES

The beginnings of State medical inspection are visible in a few States. Colorado has a State plan that is reported to be working satisfactorily, Pennsylvania sends medical inspectors into remote country districts, and New York has a recent law providing for medical inspection in every school in the State, the results of which will be watched with interest.—U.S. Bureau of Education.

North Carolina should have been added to the list as we now have eleven counties that are doing school inspection. We are unable to vouch for the effectiveness of school inspection in other counties, but the work in Buncombe is being done wonderfully well by the County Health Officer, Dr. D. E. Sevier.



## THE SCHOOL NURSE

The growing realization of the importance of the school nurse in any system of medical inspection received added impetus at the Buffalo meeting. Philadelphia school and health authorities have recently made careful investigations to test the workings of medical inspection with and without the "follow-up" by school nurses. The results showed a real saving in school time and money through nurse service. Not only did the nurse service save the pupils time that would have been lost in returning to school, but in all instances the number of defects corrected increased with nurse service. This is the day of dollar efficiency, and the school system that can show, not a mere temporary saving, but permanent economy of operation in fulfilling community needs, educational or otherwise, is rewarded with public support. The advantages of school-nurse service are particularly susceptible to demonstration by the efficiency method. Furthermore, school-nurse service justifies itself on strictly pedagogical grounds: The work of the school nurse is hygiene instruction of the most direct and practical sort, and therefore belongs in the school's field, quite independently of other considerations.

## DEDUCTIONS OF THE DEPARTMENT OF HEALTH OF NEW YORK CITY ON DEFECTIVE VISION IN PUBLIC SCHOOL CHILDREN

From 1909 to 1912, inclusive, 1,015,219 physical examinations of school children have been made by Medical Inspectors of the Division of Child Hygiene of the Department of Health. In 105,797 instances defective vision was found to exist in some degree.

The regular procedure of the Department has been to call the attention of the parents of these affected children to the existence of the physical defect and to urge the parents to take the child to the family physician for treatment. If no response to this request is received within a few days, a nurse of the Department of Health visits the parents to explain and

urge the necessity of treatment, and thereafter repeats her call as many times as may be necessary to see that treatment is obtained or until the parents definitely refuse to provide any medical care for the child. Cases of extreme neglect to provide glasses where they are absolutely needed are referred to the Society for the Prevention of Cruelty to Children. Absolute refusal on account of indifference or neglect is rarely encountered; more often refusal is based upon financial reasons. In such cases the various relief and social agencies of the City provide the needed glasses for the child, if, upon investigation, it is found that the family cannot afford to pay for them. By means of these efforts 65,940, or 62.3 per cent., of these children have obtained the treatment necessary.

Recently an investigation of the defective vision of school children has been made by a physician of this City. This physician examined forty children who were considered mentally defective or rated as delinquent or backward in their studies. Twenty-nine of the cases were followed up, and, after the fitting of glasses to these children, they were found by him to be improved mentally. The control covered a period of six months. From these results he has drawn the conclusion that the children of the public schools are not under competent medical supervision. It may be incidentally remarked that these children were taken to the physician's office to have their vision tested and that the eyeglasses furnished these children were also obtained from him.

The Department of Health considers it an unwarranted interference with the rights of the medical profession and of parents to refer children with physical defects to any special physician or dealer in medical or surgical supplies for the purpose of physical examination, treatment or the obtaining of such appliances as may be necessary to correct their defects. It believes that the parents have an absolute right to take their children to their



own physicians or to dispensaries selected by themselves.

The improvement in scholastic progress of backward children in whom defective vision has been corrected is obvious. Studies and investigations made by the Department do not warrant the conclusion that the provision of eyeglasses causes any definite improvement in the mentality of children who are actually mentally defective. In the public schools these mentally defective children are wholly under the control of the Department of Education. They are examined by a special physician of that Department before they are assigned to the special ungraded classes. It is a debatable question whether or not such children should be in the public schools or be committed to special institutions for the mentally defective, but, in either event, alienists have not corroborated the claim that the correction of defects of vision occurring in these unfortunate children acts as a panacea.

It is of interest to note here that in 1909 Dr. Leonard P. Ayres, Assistant Director of the Division of Child Hygiene of the Russell Sage Foundation, conducted a careful study of 7,608 children in the public schools to determine the degree of retardation caused by the various physical defects. He found as a result of his investigation that physical defects as a whole caused a retardation that was equal to an additional year in the complete eight-year course. The only defect he found that did not affect retardation in any way was that of vision. The children with this defect finished their course in eight years, with no loss of progress.

There is a middle point of view between the extremes of these two investigations. The Department of Health for many years has had supervision of the medical inspection and examination of the children in New York City's public schools. Its system of school inspection is broader in its scope, and equally, if not more, efficient in its results, than that maintained by any other large city in the country. That the correction of physical

defects in school children helps them to progress in their studies has been amply demonstrated. From time to time specialists in some one branch of medicine make investigations to determine the effect on school progress of the correction of the specified defect. There is decided danger that overconcentration in any specialized line may give rise to the assumption that the defect in question is the only one of supreme importance.

From its extended experience with the subject, the Department of Health is convinced, not only that the correction of defects of vision is a necessity, but that the reduction and correction of the other physical defects in children are of equal importance.

It is a hasty and ill-balanced conclusion to infer that anything less than proper attention to all of the physical defects and deficiencies of the children, with the needed adjustment of home and school conditions, as well as proper medical attention, will give that mental and physical health which is essential to well-rounded child life. The necessity of care and adjustment of the many features which may have an effect upon the health of the child during the nineteen hours of the day when it is not in school are fundamentally of just as great, and, in many instances, of far greater, importance than those conditions which affect it during the five hours it is in school.

The health of the 700,000 children in New York City's public schools should not be judged by the results of any special group of twenty-nine children. Racial, social and economic conditions all must be studied and adjusted as they pertain to the life of the child, both in the school and at home. Proper medical treatment must be provided for the correction of physical defects, and the individual idiosyncrasies of the child studied, in order that individual treatment and care may be assured in each case.

These facts are the fundamental ones upon which the present system of medical examination of school children in New York City is founded.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep the milk clean.

Butter fat (legal minimum) 3.25; Specific gravity (legal minimum) 1.029; Total solids (legal minimum) 11.75 indicate the chemical composition of the milk. Samples below standard would indicate adulteration.

## Milk Test for Retail Dairies, December, 1913

	BACTERIA	B. F.	SP. GR.	T. S.
Biltmore Certified.....	650	5.0	1.032	14.6
Biltmore.....	9,000	5.6	1.034	15.4
Oak Grove.....	18,000	4.4	1.032	13.4
Violet.....	18,000	5.2	1.029	13.6
Fenner Farm.....	20,000	4.4	1.032	13.4
Sunset.....	20,000	5.1	1.033	14.5
Redmond.....	23,000	4.4	1.029	13.6
Anandale.....	24,000	5.2	1.0295	13.7
Edgewood.....	25,000	5.8	1.032	15.2
Oak Springs.....	26,000	4.4	1.032	13.4
Pleasant Hill.....	27,000	4.9	1.030	13.6
White Pine.....	28,000	5.4	1.029	13.9
Laurel Springs.....	30,000	4.6	1.031	13.4
Dryman's Mountain.....	30,000	5.8	1.033	15.4
Woodfin.....	31,000	4.8	1.0295	13.7
Wildwood.....	32,000	5.0	1.0295	13.5
Melrose.....	32,000	5.0	1.029	13.5
Locust Grove.....	40,000	5.1	1.034	14.7
Mountain Range.....	40,000	5.5	1.0295	14.1
Sevier.....	45,000	4.8	1.029	13.2
Middlebrook.....	76,000	5.2	1.032	14.4

## Milk Test for Wholesale Dairies, December, 1913

	BACTERIA	B. F.	SP. GR.	T. S.
Sharp.....	17,000	5.0	1.029	13.4
Dillingham.....	21,000	4.8	1.033	14.2
Nettles.....	23,000	4.0	1.029	12.2
McCall.....	25,000	5.2	1.034	14.8
C. C. Greenwood.....	27,000	5.2	1.029	13.6
Elmer Carter.....	30,000	4.4	1.029	12.7
Swain.....	31,000	5.1	1.0295	12.1
J. V. Baird.....	32,000	4.6	1.0295	13.0
Scarborough.....	35,000	4.4	1.029	12.7
Carter Brothers.....	37,000	5.0	1.029	13.4
Calloway.....	39,000	4.5	1.029	12.7
Griffin.....	40,000	5.2	1.032	14.4
W. A. Baird.....	41,000	4.0	1.0282	12.0
O. Baird.....	54,000	5.4	1.027	13.4
Stony Knob.....	62,000	5.0	1.029	13.4



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OF THE  
HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 37

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Feb. 1914

ASHEVILLE opens wide her doors to the sick and the well from every clime, but she demands that the sick shall so comport themselves that they shall not become a menace to the health of her citizens or the stranger within her gates.



"Don't wait for an inspector to inform you that the back yard or cellar needs attention."



"Don't expect that the landlord is coming around every morning to clean up the premises for you."



"Don't fail to drain your house offal before putting it into the swill barrel. If drained and wrapped in paper it is easily removed in winter, and is protected from flies in summer."



Summer is coming—are the flies?



Not if every man cleans up his own back yard and keeps it clean.





## Health Department City of Asheville

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                          { Colored - 5,000 }

## STORY OF MILK INSPECTION IN ASHEVILLE

In the spring of 1907 the uneasiness with which the physicians of Asheville had long regarded the milk supply of the city, was made acute by the discovery of typhoid fever on a dairy farm and a moral certainty that several cases of fever in town was traceable to the milk supplied by this dairy.

At this time the milk inspection was limited to a register of any farmer who might wish to sell milk and an occasional visit to his farm by the sanitary inspector whose main duties consisted in keeping the streets clean.

The Board of Health took the matter up and appointed L. M. McCormick as milk inspector with the instructions to investigate and suggest remedies for conditions found.

A survey of the situation showed conditions as bad as might have been expected in the absence of any supervision of the business. Any farmer could become a licensed dairyman by simply registering his name with the city clerk. And while a few dairies were making an honest effort to supply a pure high grade article, competition for trade tempted many to do "as the other fellows" do, put in all the water the trade would stand, and meet the other fellow's prices.

Barns and equipment were simply any old thing that the farmer had and his highest standard was "I won't sell anything that I wouldn't eat myself," good as far as it went, but—

A call for help from the United States Department of Agriculture brought Dr. G. M. Whitaker in charge of market milk inspection for the department, who gave great assistance in suggesting standards to be worked up to, and methods of helping the dairymen to meet them. His comment that Asheville had the best dairy in the South and some of the worst, about covered the conditions found.

A constructive rather than a destructive policy was adopted and, the dairymen were told how to improve their barn equipment, and given a fair chance to do so. A few found it unprofitable to meet the new conditions and went out of business. A rigid daily inspection of milk in the wagons as it came to town was also inaugurated and the dairymen soon found that milk showing sediment in the bottom could not be delivered, and went actively to work to stop this source of loss.

The same fall an ordinance covering the requirements of the situation was drawn and became a law in November of



1907. This ordinance contained provisions for regulating dairy barns and equipment, the condemnation and destruction of milk found to be unsatisfactory, and the licensing of all dairymen before beginning business. The license included an obligation on the dairymen to report immediately to the Health Department any contagious diseases occurring in their families and any change in the methods of business as they should occur.

Frequent inspections were made at the dairy farms and every effort was made to help the dairymen to learn better methods of producing their milk, including raising of crops, the breeding of cattle and the preparation of food for the cattle. The building of silos was especially urged as an aid to getting more milk in the winter time. And the assistance of the North Carolina Department of Agriculture was enlisted in this work. Mr. J. M. Conover, then State dairyman, was particularly helpful and made frequent visits and spent much time in discussing farm problems with the dairymen.

The farmers interested responded freely to this program, and better dairy methods and a more satisfactory milk supply were the result. The very natural suspicion and resentment of interference with which the dairymen first regarded the milk inspection, rapidly disappeared.

In 1909 the task of inaugurating tuberculin testing for all dairy cattle was taken up and with the assistance of the State veterinarian, Dr. Tate Butler, who kept an assistant in Asheville for two months for this purpose, all dairy cattle were thoroughly tested for tuberculosis, with the gratifying result that only 3% were

found suspicious and one foci of infection discovered. This showed that this dreaded disease had not obtained a permanent foothold in our territory, and also gave Asheville the credit of being the first city of its size in the country to obtain a known tuberculin tested milk supply.

Annual tuberculin tests have been made by the city milk inspector as a part of the routine work ever since, and in recent years only about one quarter of one per cent of the dairy cattle have shown suspicious reactions. While this tedious work has been done for the dairymen free of charge, they could very reasonably have been required to employ outside veterinarians to test their cattle. But owing to the lack of competent veterinarians, the large cost to the dairymen when the work is done by private contract, and the probability of unnecessary loss to the dairymen if the work is not done by experienced men, the Health Department has kept up the work.

The State co-operates to the extent of supplying tuberculin of standard quality and checking the reports, but has been unable to furnish men to do the work since the first year.

The importance of keeping out this disease may be appreciated by comparing our data, with that of some sections of the country where 20% and even 35% of cattle tested are often found infected.

In 1912 a bacteriological laboratory was added to the Health Department's equipment and since then a routine bacterial count has been made of the market milk, several samples being collected from each dairyman's supply each month, and the average count per unit is published in the Bulletin. This method of checking the



purity of milk, cleanliness of producing methods, etc., is standard in all large cities, and when applied to our home product gave gratifying evidence of the good results obtained by the previous inspection method, and indicates very plainly where the inspector's time may be best employed in keeping up our standard.

In 1913 the Buncombe County Medical Society appointed a Milk Commission, which, with the co-operation of the laboratory of the Health Department and the Biltmore Dairy, gave us Certified Milk, and Asheville has the distinction of having the only practical working Certified Milk supply in the South.

Asheville still has "The best dairy in the South" but the latter half of Dr. Whitaker's remark is no longer true. For better equipment, new barns and better methods have come with the co-operation of the milkmen, and the inspectors of the Health Department.

### SOCIAL SERVICE CONFERENCE AT RALEIGH

There are a great many conventions, societies, conferences, etc., held in the State each year, on many and varied subjects. I know also that the people in this day and time use the superlative degree rather too freely in speaking of things in which they are interested, and especially of reform or up-lift movements, but I do not think I over-reach the importance of this meeting when I say that, considered from the standpoint of good done the State, it was the most important meeting that has ever been held in the State.

Social service work, or work for the betterment of our fellowmen was considered from every standpoint and looked

at from every angle. The conference was largely attended. The addresses, as had been previously announced by the secretary, were by experts on the various lines and they were, on the whole, ably prepared and forcefully presented. They were for the most part presented by men whose aim in life is not to see how many dollars they can extract from their fellowmen and put into their own pockets, but by men who consider money as a secondary consideration and the betterment of the people of North Carolina of first consideration.

Every person in the State of North Carolina who is interested in the improvement of our people should become a member of this society and should if possible attend its meetings. The address of the president, Mr. Clarence Poe, was worth a trip to Raleigh to hear. There were other able addresses also. These will all be published in the Social Service Quarterly which is sent free to members. The price of membership is only \$1.00 per year. Send your name and address and \$1.00 to Mr. Warren H. Booker, Secretary, Raleigh, N.C. and receive this Quarterly and read these splendid addresses and get en rapport with this great work.

### A MODERN VERSION

The writer of the Old Oaken Bucket was a poet not a scientist or he might have written:

"Filled with nitrates and nitrites and slimy,  
Reeking with filth it arose from the well,  
The old oaken bucket, the iron bound bucket,  
In fact, the slop bucket that hung in the well."

In uplifting, get underneath.

—George Ade.



## NORTH CAROLINA SCHOOL FOR FEEBLE-MINDED

At a meeting of the Board of Trustees of this institution on February 17th Dr. C. Banks McNairy of Lenoir was elected superintendent. The Executive Committee reported that the institution will be ready to open in about two months.

The constitution of North Carolina commands the people, through their legislature, to protect and care for the feeble-minded of the State just as it does the insane and the pauper. The constitution requiring this was written in 1867—forty-seven years ago—and yet this institution is the first step the State has ever taken towards carrying out this command.

Dr. McNairy is a good surgeon, a man of executive ability and well fitted for the work. The naming of Dr. McNairy as superintendent of the institution at once assures success in the work. Both the custodial part of it in the institution and the extension work which should extend all over the State.

The greatest thing we can think of in this world is a sound mind in a sound body. Until recent years no attention was paid to either. For the last decade, however, a persistent effort has been made to teach our people how to grow and keep a sound body. Little attention is yet paid to the sound mind. This important campaign now falls on us. The work of the institution mentioned above is a long step in the right direction.

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## THE WOMAN'S CLUBS

One of the most helpful signs in the last few months is the fact that the Woman's Clubs in the various towns in the State have taken up the study of such subjects as sex hygiene and eugenics. Recently the Woman's Club of Asheville had one of its members prepare a paper on this subject and the members showed

great interest in the essay and a general discussion ensued.

In the town of Burlington recently the Woman's Club had several addresses delivered by an expert on these subjects. The Y.W.C.A. of Asheville recently had a lecturer here who delivered three splendid lectures to interested, if not large audiences.

This is among many of the important studies of our time, and it bodes well that the women are beginning to take up the study.

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## OUR INCINERATOR

Our incinerator is at last finished and seems to be entirely satisfactory. The incinerator is built after plans obtained from the Dixon Incinerator Company. This Company having gone out of business we secured their engineer, Mr. Geo. J. Meade of Toledo, Ohio, to superintend the construction for us.

For several days it disposed of 30% more refuse than the capacity specifications called for. Everything fed to it, including whole dead horses, disappeared in a heat that burns even the smoke and odor.

The incinerator will make it possible for the wagons to make perhaps twice as many loads as they did to the old dumping ground, and we can therefore keep the city cleaner than we could with the former long haul. We hope also to add some other facilities. Perhaps an electric truck for the removal of trash and garbage.

We hope soon to be able to remove the kitchen garbage, stable manure and all rubbish of whatsoever kind that may accumulate around a house. That means that we expect to keep this town clean in every respect. Let us state also that we expect the co-operation of the people. Clean up back yards, telephone 152 and we will do the rest.



## DON'T FAIL TO EXERCISE

No one is at the highest point of efficiency who is stale physically. The American custom of overeating and under-exercising is largely responsible for the increased number of deaths from chronic Bright's disease.

Any man who is exhausted or who develops sore muscles after a two or three mile walk is in bad shape physically and would be a poor subject for an acute illness.

Walking daily a mile on the way to business or on the way home would improve the action of the heart and lungs, improve digestion, promote sleep, lessen the liability to illness and fit one for the fight when illness comes.

## WHY IS THE SWILL BARREL ?

The problem of disposing of kitchen refuse is an ever present one with the housekeeper.

We have repeated requests from housekeepers for assistance in getting their kitchen garbage removed and we would offer the following suggestion on this problem:

Everyone knows that if the mixed refuse from the kitchen is thrown into the garbage can together with more or less dishwater, that it soon becomes odoriferous, a nuisance and a difficult thing to have removed. We would suggest therefore that a wire basket be provided and the kitchen and table refuse be placed in sink to drain. When the refuse is thoroughly drained it is an easy matter to dry it sufficiently to burn in the kitchen range. Where burning is not practical it can be wrapped in paper, to exclude flies, and placed in a covered galvanized can, and if a little chloride of lime or other disinfectant is sprinkled over such packages they will keep for some time without becoming offensive. Garbage treated in this manner will be collected by our regular wagons the same as tin cans and other rubbish.

We believe that the above plan properly carried out will solve a troublesome problem and at the same time remove the necessity for an outside slop man who may or may not come to remove the slop in time to prevent a nuisance, but who does not, sometimes.

The covered galvanized can is required by law for the reception of garbage from the kitchen so all householders, hotels, etc., already have them (?)

## THE BUTCHER'S LAMENT

The meat inspector is mine enemy, I shall not like him.

He maketh me to shoo out the flies and cover the sausage mill.

He showeth me the meat I shall sell, and that I shall not.

Yea, verily tho' I scrub the ice-box twice yearly, he sayeth it is not clean.

He kicketh if I keep hogs in the back yard and sayeth it is unsanitary.

He smelleth of my sausage and heaveth it in the slop barrel, even tho' it be but slightly sour.

He demandeth that I use not the larynx and mammæ for sausage.

And he speaks in harsh tones if I disobey him.

I bringeth my meat to his office for inspection, wrapped in tree tops.

He turneth it down and insists that I wrap it in clean, white cloths.

Yea, verily, tho' mine hog grew up in mine own orchard, he condemneth it for cholera, and fly-blows, and I lose twelve dollars and a half.

He hurls threats at me if I bring not the livers and "lights," and if I am slow about paying my bill at the month's end, he maketh me bring the money at the time of inspection.

He anointeth my livers with kerosene and insisteth on seeing the hides and earmarks even tho' I tell him there is none.

Surely, the words "Clean up and stay clean" will be hurled at me all the days of my life, and I shall live in fear of the inspector for ever and ever. Amen.  
—Mulford Vet. Bulletin.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep the milk clean.

Butter fat (legal minimum) 3.25; Specific gravity (legal minimum) 1.029; Total solids (legal minimum) 11.75 indicate the chemical composition of the milk. Samples below standard would indicate adulteration.

## Milk Test for Retail Dairies, January, 1914

	BACTERIA	B. F.	SP. GR.	T. S.
Biltmore Certified.....	700	4.5	1.033	13.8
Biltmore.....	1,000	5.0	1.033	14.4
Anandale.....	15,000	4.6	1.033	13.8
Sunset.....	21,000	5.2	1.033	14.6
Violet.....	22,000	5.2	1.029	13.6
Melrose.....	22,000	6.0	1.033	15.5
Oak Springs.....	25,000	5.4	1.032	14.6
Fenner Farm.....	25,000	4.6	1.034	14.2
Oak Grove.....	26,000	4.2	1.033	13.6
Dryman's Mountain.....	29,000	4.6	1.033	13.9
Emma Farm.....	30,000	4.6	1.033	13.7
Pleasant Hill.....	33,000	5.0	1.033	14.5
Edgewood.....	38,000	5.4	1.032	14.6
Brook Side.....	43,000	5.2	1.030	13.9
Sevier.....	48,000	4.3	1.0295	12.6
Middlebrook.....	50,000	6.0	1.0319	14.6
Laurel Springs.....	50,000	4.6	1.029	12.9
White Pine.....	55,000	5.4	1.033	14.8
Locust Grove.....	50,000	5.0	1.030	13.7

## Milk Test for Wholesale Dairies, January, 1914

	BACTERIA	B. F.	SP. GR.	T. S.
Dillingham.....	14,000	4.6	1.029	13.0
Scarborough.....	23,000	5.4	1.0295	14.0
Nettles.....	23,000	4.2	1.028	12.2
McCall.....	25,000	5.2	1.034	14.8
J. V. Baird.....	25,000	4.4	1.033	13.7
Sharp.....	31,000	5.4	1.032	14.8
Mountain Range.....	32,000	5.6	1.033	15.2
W. A. Baird.....	70,000	4.4	1.027	12.2
Carter Brothers.....	71,000	3.6	1.030	12.0
Elmer Carter.....	71,000	3.6	1.031	11.7
M. Greenwood.....	74,000	4.0	1.029	12.5
Calloway.....	75,000	4.5	1.029	12.0
Swain.....	80,000	5.0	1.033	14.6
O. Baird.....	86,000	5.4	1.026	13.4
Stony Knob.....	95,000	3.6	1.033	12.7



# DIRT IS DEADLY



There was a dirty man



And he kept a dirty town. He cared not a button  
what was said, said, said.



So disease came and  
settled there



To make the town its own, And the dirty man was very  
promptly dead, dead, dead.



K.F. WHITE-1913

A city is as clean as its people.

\* \* \*

Well kept alleys pay bigger dividends  
than well kept cemeteries.

\* \* \*

A man is known by the company he keeps,

A town is known by the streets it sweeps.

\* \* \*



Chicago Health Dept Educational Poster No 162. Designed by Dr. G.B. Young.

# BULLETIN

OF THE  
HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 38

Entered as second-class matter, September 28, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

Mar. 1914

ASHEVILLE opens wide her doors to the sick and the well from every clime, but she demands that the sick shall so comport themselves that they shall not become a menace to the health of her citizens or the stranger within her gates.



"Persons enjoying good health usually have good morals."



"Next to the saving of one's soul, the saving of one's body should be his greatest concern."



"Give me health and a day and I will make the pomp of Emperors ridiculous."—Emerson.



Every citizen is responsible to the community for his own good health and likewise that of his neighbor.





## Health Department City of Asheville

### BOARD OF HEALTH

MAYOR J. E. RANKIN, Chairman.

B. M. LEE, City Engineer.

C. W. BROWN, Chairman Finance Committee,  
B. of A.

W. R. PATTERSON, Chairman Sanitary Committee,  
B. of A.

DR. L. B. McBRAYER.

DR. E. B. GLENN.

DR. F. J. CLEMENGER.

DR. W. L. DUNN.

### SANITARY COMMITTEE BOARD OF ALDERMEN

W. R. PATTERSON, Chairman.

R. L. FRANCIS.

C. W. BROWN.

### EXECUTIVE OFFICERS

L. B. McBRAYER, M.D., Health Officer, Phones:  
Residence, 124; Office 1526.

W. H. BIRD, Sanitary Inspector, Phones: Residence, 374; Office, 152; Stable, 294.

L. M. McCORMICK, Meat and Milk Inspector,  
Chemist and Bacteriologist, Phone 152.

ERNEST ISRAEL, Sewer and Plumbing Inspector.

W. FRANCIS, Water Superintendent.

**Population** { White - 15,000 } **20,000**  
                          { Colored - 5,000 }

### PHILANTHROPY

Cincinnati is just completing the finest hospital in the world, according to Dr. William H. Welsh of Johns Hopkins, who is a recognized authority on the subject. The cost is \$4,000,000.00. This hospital comprises everything that is needed in the way of a hospital—surgical, medical, lying-in, children, contagious, including mumps and whooping cough, nurses' home, etc., everything except tuberculosis and this is provided for in a different section where the city owns and conducts a tubercular sanatorium with 350 beds, and this will be rapidly increased to 1,500 beds. The money for the erection of this hospital plant was obtained by the issuing of bonds. My! \$4,000,000.00 is lots of money to spend in erecting a hospital in one city, and yet a careful estimate shows that the doctors of Cincinnati do one-fourth that much charity, professional work every year. The doctors of Cincinnati do \$1,000,000.00 worth of work for the poor of that city every year, for which

they receive no compensation so far as the same is measured by money. The doctors of Cincinnati do an amount of work without pay for the poor of that city every four years which equals the cost of that magnificent hospital plant. Where can you find greater philanthropists than the doctors of Cincinnati? What the doctors of Cincinnati are doing, the doctors everywhere are doing.

Let's look at our own city of Asheville. A short while ago an effort was made to raise \$100,000.00 for the Asheville Mission Hospital, where, alone in all Western North Carolina people who are unable to pay, can obtain hospital care without cost—where 75% of the cases received are indigent cases—where 666 indigent cases are treated every year. And what happened? Although the campaign was strenuous, considerably less than \$50,000.00 were raised. And yet the doctors of Asheville do that much charity work among the poor of Asheville and vicinity every year. The doctors of Asheville are called upon to do \$50,000.00 worth of charity work every year and the entire population of Asheville would not contribute that amount for one year. The doctors, God bless them, may not receive their just reward in Asheville or on earth, but when they go where "moths do not corrupt nor thieves break thru and steal," great will be their reward.

### CO-OPERATION

Time was when everybody went it alone. The country was sparsely settled and the statement made in holy writ that man does not live to himself alone was not so apparent as it is today. Everybody from so-called lowest to the so-called highest, which being interpreted means from the poorest to the richest, find co-operation absolutely necessary.

The rich men pool their interests and we have been taught to call it trusts. Good trusts or bad trusts as the case may be. The same thing holds good down to the beggars who, we are informed, have

unions, alliances or organizations of some kind by which they can steer each other off the bad places where they are liable to be arrested or imprisoned or sentenced to the roads. And on the other hand inform each other of the places where the grass is green and picking good.

Likewise the rich men are dependent on the men whom they employ to carry out their plans and schemes for increasing their wealth. The United States government has its head, of course, and a pretty good one we all believe at this time, but the president and his cabinet and congress could not work out their plans, could not carry on the various important works of this great government without men to carry out and put into effect the laws and policies promulgated by them.

The same is true of state government. The same is true of city government and the same is true of the various departments of the city government, and especially true, perhaps, of the Health Department of the city. Not only must they have proper officers to carry out the plans but the people too must be in sympathy and co-operation with these various branches of government in order to accomplish the greatest good. In fact, no law can be enforced unless it has the support of the people.

We have said all this to try to impress upon every citizen of Asheville the necessity of his co-operating with the Health Department in making Asheville the cleanest town in the world, and the word **CLEANEST**, being interpreted in this sense, would mean the healthiest.

The Health Department of Asheville has been working towards this end ever since its establishment. The progress at first was slow. Slow for many reasons: Because the people were not sufficiently interested in their own health to co-operate with health work along the line it is being done in Asheville today. Then too when the Health Department was first established health work or the prevention of disease had not reached the

point of efficiency that it has today. There was not the one-hundredth part of the work being done, there was not one-thousandth part of scientific knowledge in regard to the prevention of disease that there is today and with this increased knowledge of the prevention of disease comes increased responsibility of the people.

The Health Department of Asheville and the people of Asheville have now arrived at the place where there is no reason under the sun why Asheville should not be the cleanest, healthiest city in the United States. This could be made so this summer if the people will co-operate with the Health Department. We have written this to ask for this co-operation. We want every back yard in Asheville, every cow stable or horse stable as clean as a flower garden whether we have any flowers in them or not.

Our incinerator is completed and our wagons can make seven loads per day where we have heretofore made only three, and we greatly desire that this summer shall show a city without spot or blemish and if the people will co-operate with the Health Department in this measure, as they always have supported measures for the best interests of the city, we will have it.

The Civic Betterment League is in hearty accord with this policy and I verily believe that every other citizen of Asheville will also be in accord with this policy if they stop to think about it. And this is written in the hope that they will **STOP and THINK.**

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### RESPONSIBILITY OF SCHOOL TEACHERS

It is indeed gratifying to note the large percentage of teachers in the public schools that are "alive to their every increasing responsibilities.

The teacher of a decade or two ago was entrusted with the intellectual development of the pupils in her care. Moral development followed and more recently



she is being charged with the physical well-being of the pupil as well.

It looks at times as if the responsibilities are growing more rapidly than are the means provided for the successful maintenance thereof.

In some respects, at least, school teachers and health officers are alike. Both have large responsibilities; the future happiness, success and worth of the growing generation rests largely with them; the required standards of their qualifications are being continually raised, and both are as a rule very much underpaid. Other professional people, with less responsibility, receive better returns for the services they render, and it should be so with the health officer and the school teacher.

No doubt, as is so often stated, many capable men and women are deterred from entering these professions because of the small financial prospects offered. Those who do enter and make it their life-work are true philanthropists, yet they do not receive the sympathy from the public that philanthropists in other lines of endeavor do.

Year after year these people have been patiently carrying on their work for the benefit of mankind, duty upon duty has been added to their care, until it looks as though new methods, and radical changes are imperative. There is a limit to every person's possibilities.

That the large number of teachers of today realize their responsibilities in the physical development of the child, is not sufficient to correct existing evils.

The teacher knows that adenoids, mouth breathing, malnutrition, infectious disease, all tend to develop degenerative tendencies; they can detect these and numerous other ailments which, if not given early attention, may permanently injure the child. In very many cases the parents fail to realize the condition of the child and the teacher is helpless.

In every school there should be regular medical examinations by physicians, and

at least one nurse should be permanently employed. With this assistance the teacher will be able to give a creditable accounting even in the physical development of the pupils.

True, it involves expense, for where the parents are unable or unwilling to care for the child, the city or school board should do so; but in the end it will prove much cheaper and better than the present methods, which are filling our prisons, our asylums, our hospitals, and other state institutions, with unhappy, suffering and unproductive people.

We are living in a day of unrest, too many sacrifices are made to "Tuberculosis"—a curable and preventable disease; too many are afflicted for life as the result of measles—that disease of childhood that is receiving but indifferent attention. The nation is bowed in grief at the enormous toll in life, in health, in happiness and in energy that is demanded by conditions that can be bettered, by diseases that can be controlled. And while it is true that much of this responsibility has been placed upon the health officer and the teacher, it is equally true that the awakening of public sentiment as to the needs of the day rests largely with these same health officers and school teachers.

The work is necessarily of a local nature, and what is done for the city in which you live must be done by the health officer of your city and the teachers of your schools.

### SCHOOL "REPEATERS"

"An official report states that 34% of the children attending public schools in Baltimore are 'repeaters or laggards, due to physical defects.' Out of these 7,122 children examined, 1,540 were repeating the grade at least once and many were going over the work two, three and even four times. At an average cost of \$17.84, these repeaters cost the city about \$27,427.00 a year. At the same rate for all the city's schools, repeaters are costing

the city \$250,000.00 a year. It is safe to assume that the same condition prevails in other cities, as the neglect of the health of school children is a common offense."

#### What About "Repeaters" in Asheville?

A survey by the United States Bureau of Education showed that 64% of the school children of Asheville were behind with their grades. That means that 2,560 pupils in the Asheville schools were behind with their grades, at that time, while 1,440 pupils were in the grades where they belonged, according to age. This is costing the city of Asheville a great deal of money and this should be remedied or the School Board should tell us the reason why. In the city of Baltimore, as noted above, with one building with 7,000 children and 34% or 1,540 "repeaters," it was costing the city \$27,427.00. Here in Asheville, while we only have 4,000 children, the per cent is nearly double and our "repeaters" number 2,560, something over one thousand more than the school named in Baltimore. At the same rate of expense, the "repeaters" in Asheville would cost us \$45,250.00. But let's cut that in half and then throw away a few thousand more and surely our estimate would not be too high, but rather too low, when we say that the cost of maintaining the "repeaters" in our City Schools every year would be \$20,000.00. Now if school inspection would cut this in half it occurs to us that it would be a good financial investment, to say nothing whatever of the good that is done the children and the city and State.

The School Inspection at most, would not cost more than \$3,500.00 with a possibility of costing not more than \$2,500.00. There is, however, another feature that ought to and does appeal to every citizen of Asheville, be it man or woman. It is this, a certain per cent of these "repeaters" are mental defectives. From this class of mental defectives comes a large per cent of our criminals, insane, paupers, ne'er-do-wells, etc. Now if by

school inspection, these mental defectives could be found, and they can, and could be sent where they could be cared for and properly treated, to-wit: to the North Carolina School for Feeble Minded at Kinston, or if they are not sufficiently defective for that, could be placed in special classes, where they could be taught and treated according to their natural capacity and not according to the fixed rules of the pedagogue, it is a safe estimate that ten or twenty thousand dollars a year could be saved the city, county and state—in dollars and cents, mind you—for in this day and time, we are not sufficiently civilized to weigh and act on a matter of this kind from a sense of humanity, but only from a standpoint of dollars and cents.

In addition to this it may not be improper for me to say that in a certain large city in a nearby state, an investigation was made of the "redlight" district, and the health officer found that 50% of the women were of the class of mental defectives referred to above. I would like for the church members of Asheville and all those philanthropists and good citizens who are interested in stamping out this particular form of vice, to stop and think about this for a moment. If those mentally defective women in the "redlight" district were found by school inspection and cared for as they ought to be, at once, and as they have a right to be, one-half of the social evil could be cut off.

Perhaps you say, it is impossible to make a thorough examination in the "redlight" districts of the city and take the care of these defective women they ought to receive. This is not admitted for a moment. It is not impossible at all, but we will readily admit that it is very improbable, because there is not sufficient public sentiment behind it to demand it. That is one reason and we would like to impress this particularly upon our church workers and the good women of our city and county, who, in a



large measure, will mold our public sentiment. Answer me, are you guilty, or not guilty?

But if for lack of public sentiment, we cannot carry out the idea just mentioned, we could put a stop to the continued perpetuation of these places of vice, by taking care of the defective girls as they grow up, and if school inspection were properly done in Asheville, as it will be if it is ever done, and it will be, all of these natural defectives will be detected and will receive proper care.

The Lindley Training School is a very valuable institution and the good women who are doing this work are doing a most valuable work, but their work is not, to any extent, preventing the social evil. If their work were the only work done toward preventing the social evil, it would be in comparison with preventing the mental defectives that go into this life, as the ratio between the task of damming the Mississippi River at its source, the mouth of Lake Itasca to the attempt to dam it at its mouth at New Orleans.

Mind you, I am not criticising their work—it is a most important work and these women that are managing and carrying on this work are veritable angels of mercy and more of it should be done, but let's get at the root of this evil.

I think there is a tendency in school inspection to be superficial. The school inspection in Asheville or anywhere else should be of course, an inspection of every child for physical defects, as is generally done by all physicians who do school inspection, and in addition to that, there should be made a thorough, systematic study of every child who is behind in his grade and the cause, with all other observations should be recorded and filed. If the school Board had this information, it could then proceed to apply a remedy. For such information as this it would pay the school board in dollars and cents to pay \$5,000.00 or \$10,000.00 a year if it were necessary.

Dr. John Hey Williams is the medical member of the School Board, and the physicians of Asheville look to him to put into effect this economic measure, this school inspection, in order to save to the school fund the large amount of money it is losing every year and to save to the people of Asheville their children.

We would not have this article considered as an attack upon the School Board of the city of Asheville, or a criticism of the School Board, for such is not the fact. The School Board is composed of our best citizens and no one doubts for a moment that they do their duty as they see it. We know that they have to strive every year to keep the expenses of our School system within the income. We know that they devote their best energy and much of their best time to looking after the schools in Asheville and to administering the great trust committed to their hands. We know that the Superintendent of the city schools is most heartily in favor of school inspection. We know that the superintendent preceding him, our beloved Prof. Tighe, was most heartily in favor of school inspection. We know that every teacher in the city schools is in favor of school inspection. We know that the School Board is considering it at this time and has considered it before and that perhaps the only reason that they have not put on the system of school inspection before is that they did not have the money. But the time has come when they must get the money or must take some money they have and install the school inspection and we believe they will do it.

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Which is more economical; to devote the necessary time and money needed to prevent disease, or maintain hospitals, asylums and other public institutions to care for the victims of disease?

\* \* \*

"It is not the number of babies born that counts, but the ones who grow up into healthy men and women."

## TREE LIFE VS. HUMAN LIFE

During the past year the federal government reports show that \$4,600,000.00 was spent upon forestry service. This is all good and well, but at the same time they spent but \$2,500,000.00 for the protection of the health of one hundred million people, or to check the annual loss of 600,000 lives from preventable diseases.

Does the government really place a higher estimate upon trees than upon men? Not at all. Do you place a higher valuation upon a tree than upon a man? Do you place a higher valuation upon a twig than upon a child? No, you do not at all. At the same time, the people of this United States, have let our representatives in Congress, understand that they are extremely interested in the protection of our forests and rightly so, while we sit quiet and idle, not even thinking, while 600,000 people in this United States die every year from preventable diseases. Some of these 600,000 people are your people and my people—some of them may come from your family and my family. Hadn't you better let your Congressman and Legislator know that you are interested in the life and health of your people—of your children? If so, your representative in our State and National government will pay more attention to the health of your people and your children than they do to the trees on the mountainside. It is up to you.

## SIMPLE RULES

Rules to be followed if preventable disease is to be eliminated from the community. The rules, however, demand the co-operation of health officer and layman, which in many instances is difficult to secure, owing to the ignorance of the latter in regard to sanitation.

The notification of every case when it is first recognized; the registration in central office of facts as to each dangerous thing or person; the examination of the seat of danger to discover its extent, its

cause and new seats of danger created by it; the isolation of the dangerous thing or person; constant attention to prevent extension to other persons or things; destruction or removal of disease germs or other causes of danger; analysis and record for future use of lessons learned by experience; education of the public to understand its relation to danger, checked or removed, responsibility for preventing recurrence of the same danger, and importance of promptly recognizing and checking similar danger elsewhere.—Eugene H. Porter, Commissioner of Health, City of New York.

We have been for some time trying to do the very things recited above in Asheville, and it is our opinion that Commissioner Porter has covered the ground.

## NO SCARLET FEVER AND DIPHTHERIA IN ASHEVILLE

At this writing, March 9th, we have not a single case of scarlet fever or diphtheria in Asheville. This is so seldom the case, in Asheville or any other city the size of Asheville that it is worthy of notice. If we had our way about it, we would keep the city in this condition for all time. What about it, Mr. Citizen, are you not in favor of it?

The physically defective child will continue to be burdened with an insurmountable handicap in his struggle for health and an education until we have a reasonable and effective physical supervision of school children.—Idaho State Board of Health.

The community owes it to the child to see that he is given proper surroundings in which to live.

\* \* \*

Unless a health officer is given the necessary authority to enforce the ordinances pertaining to his work, the community can not justly hold him responsible for failure.



The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep the milk clean.

Butter fat (legal minimum) 3.25; Specific gravity (legal minimum) 1.029; Total solids (legal minimum) 11.75 indicate the chemical composition of the milk. Samples below standard would indicate adulteration.

## Milk Test for Retail Dairies, February, 1914

	BACTERIA	B. F.	SP. GR.	T. S.
Biltmore Certified.....	800	5.4	1.0318	14.6
Biltmore.....	12,000	5.4	1.032	14.6
Anandale.....	17,000	4.8	1.0130	13.7
Violet.....	18,000	5.8	1.0335	15.7
Oak Springs.....	19,000	5.0	1.033	14.6
Oak Grove.....	19,000	4.4	1.0328	13.6
Edgewood.....	20,000	5.4	1.0285	13.5
Fenner Farm.....	21,000	4.6	1.0317	13.6
Dryman's Mountain.....	21,000	4.6	1.0312	13.5
Melrose.....	21,000	5.6	1.0332	15.3
Wildwood.....	23,000	4.8	1.0325	14.5
Pleasant Hill.....	22,000	4.2	1.0302	12.7
Emma Farm.....	24,000	4.6	1.0322	13.7
Locust Grove.....	26,000	5.0	1.0340	14.6
Sunset.....	28,000	5.0	1.0335	14.5
Mountain Range.....	33,000	5.0	1.0295	13.4
Middlebrook.....	37,000	5.0	1.0312	14.0
White Pine.....	35,000	5.4	1.0312	13.4
Sevier.....	40,000	5.0	1.032	14.2
Brookside.....	44,000	4.2	1.0325	13.2
Laurel Springs.....	46,000	5.0	1.0315	14.1

## Milk Test for Wholesale Dairies, February, 1914

	BACTERIA	B. F.	SP. GR.	T. S.
Dillingham.....	16,000	4.6	1.002	13.8
Ed. Sharp.....	19,000	4.6	1.033	13.7
J. V. Baird.....	19,000	4.4	1.033	13.7
M. Greenwood.....	30,000	4.2	1.0295	12.5
Nettles.....	30,000	4.2	1.0295	12.6
Scarborough.....	33,000	4.4	1.030	13.1
Stony Knob.....	33,000	5.6	1.027	12.8
Carter Brothers.....	35,000	5.0	1.033	14.4
Calloway.....	42,000	4.2	1.031	12.8
W. A. Baird.....	45,000	4.4	1.027	12.2
Rector Farm.....	45,000	5.6	1.032	15.0
Elmer Carter.....	55,000	4.8	1.033	14.3
Swain.....	57,000	4.4	1.030	14.6
O. Baird.....	75,000	4.4	1.033	13.7

# BULLETIN

OF THE  
HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 39

Entered as second-class matter, September 28, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

Apr. 1914

"ASHEVILLE opens wide her doors to the sick and the well from every clime, but she demands that the sick shall so comport themselves that they shall not become a menace to the health of her citizens or the stranger within her gates."

—L. B. McBrayer.



"Service for others is said to be the fundamental law of human happiness."



"Medicine of the future is preventive medicine."



"Education concerning the facts of preventable disease must mean the ultimate elimination of those diseases."



"The laws of health are higher than the secrets of trade."







LEWIS BURGIN McBRAYER

## Health Department City of Asheville

### BOARD OF HEALTH

MAYOR J. E. RANKIN, Chairman.

B. M. LEE, City Engineer.

C. W. BROWN, Chairman Finance Committee,  
B. of A.

W. R. PATTERSON, Chairman Sanitary Com-  
mittee, B. of A.

DR. C. V. REYNOLDS.

DR. E. B. GLENN.

DR. F. J. CLEMINGER.

DR. W. L. DUNN.

### SANITARY COMMITTEE BOARD OF ALDERMEN

W. R. PATTERSON, Chairman.

R. L. FRANCIS.

C. W. BROWN.

### EXECUTIVE OFFICERS

C. V. REYNOLDS, M. D., Health Officer  
Phones: Residence, 174; Office 15.

W. H. BIRD, Sanitary Inspector, Phones: Resi-  
dence, 374; Office, 152; Stable, 294.

L. M. McCORMICK, Meat and Milk Inspector,  
Chemist and Bacteriologist, Phone 152.

ERNEST ISRAEL, Sewer and Plumbing Inspector.  
W. FRANCIS, Water Superintendent.

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**Population** { White - 15,000 } **20,000**  
                  { Colored - 5,000 }

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### THE McBRAYER BULLETIN

For four years Dr. L. B. McBrayer labored hard for Asheville as a Health Officer. Much time, energy and ability has been spent in upbuilding the Department of Health and as a small expression of our sincere appreciation, we dedicate this issue to him.

### FURTHER EXPRESSIONS OF AP- PRECIATION

It is with a great deal of pleasure I take advantage of this opportunity to express my deep appreciation of the services of Dr. L. B. McBrayer as Health Officer for the city of Asheville. We have been very closely associated officially for the last four years, and I feel that I am in position to state that Asheville has never had a more zealous, faithful and aggressive man for the place he filled than he has been.

He has been untiring at all times, and constantly planning new methods for the improvement of the health conditions of the city. To any one familiar with the conditions, he has not only planned but achieved results, which speak for themselves. A few of which I wish to call attention to here.

Under his administration has been established a City Laboratory, well equipped, certified milk has been assured the public—a City Abattoir has been installed—a strictly modern garbage incinerator has been established—inspection of all cattle, hogs and sheep sold in the city, and improvements on methods of inspection of all other food products sold to the citizens of Asheville—improved quarantine laws have been passed—re-building and equipment of the hospital for contagious diseases—re-organization of the clerical department of the Health Office, such as records for all diseases and card index system for same—issuing of monthly health bulletin for city, and many other things.

It is with deep regret that I see him sever his connections with the city, and I feel I can truly say the city loses a most valuable man.

I wish to express here my most sincere good wishes for his success in his new field of labor, and I feel sure he will accomplish much good.

W. R. PATTERSON,  
Chairman of Sanitary Committee.

### BANQUET TO DR. McBRAYER

A banquet was given at the Langren Hotel on Saturday, March 28th, by the members of the Buncombe County Medical Society to Dr. L. B. McBrayer as a



token of their appreciation of his services faithfully rendered the city of Asheville, of their personal esteem and affection, and of their wishes for success and prosperity in his new field of work.

Dr. Paul H. Ringer acted as toastmaster, and his introductory remarks were as follows:

Gentlemen: The occasion which brings us together tonight may be characterized as one of mournful felicity. Mournful in that it marks the departure of one whom we all like, and whom we shall all miss: felicitous, in that it gives us an opportunity to show him the place he occupies in our hearts and in our midst. Men as a whole are rather reticent about expressing their opinions of one another face to face, especially when those opinions happen to be of friendship—but surely it is a good thing to be able to tell a man that we do care for him, and to be able to lay bare our true conception of his worth.

It is my province this evening to be brief, and to leave to those that follow after me the task of expressing their feelings concerning Dr. McBrayer. I feel, however, that I must say a word as coming from that body which this banquet tonight so well represents—the Buncombe County Medical Society. It has been my privilege to attend many meetings of the Buncombe County Medical Society with Dr. McBrayer—to note the interest that he has always taken in whatever tended to the advancement and best interests of the society—to hear his solid opinions roll forth from his solid frame—to listen to the mellifluous words that were wont at times to pour guilelessly forth from his honeyed tongue; and after eight years of observation, I have reached the conclus-

ion that the society has had no member upon whose loyalty it could more unfalteringly rely, no more zealous and untiring toiler, no man that strove more unremittingly for the right as he saw it, and no man whose record will show a greater amount of work more thoroughly and more conscientiously done.

Dr. McBrayer, the Buncombe County Medical Society will miss you. You have a place in our hearts as big as yourself. On the minutes of the society your name appears often and often—in the memory of each one of us it will appear more often still—not in cold black and white, but mellowed by its association with your cheery voice, your whole-souled smile, your hearty greeting. These can never fade, and in the name of the Buncombe County Medical Society I bid you Good Health, Good Luck, and God Speed!

### McBRAYER AS A MAN

BY DR. CALLOWAY

Mr. Toastmaster and gentlemen of the Buncombe County Medical Society: We have come to praise Dr. McBrayer, not to bury him, for we feel that in going to Aberdeen, he is taking chances enough.

As usual Dr. McBrayer finds an easy way to hear what would be incorporated in his obituary resolutions and he finds perhaps, a more agreeable route of departure. It is not clear to me whether he leaves Asheville to have himself toasted or to prevent being roasted.

It is my pleasure as one of his good friends to say something of him as a man. I shall attempt to make an extraction of the good from his bones, while the evil we will not disturb.

It is a temptation at times to discuss

one's merits or demerits behind his back; it may perhaps be easier to discuss him in any sense, during his absence but with the prisoner in the box and with a multitudinous jury of friends to judge, I doubt if the prosecuting speaker will press his case very hard.

I am most certainly not prompted by "stump" ambition when I say that I feel glad and honored to be called upon by your toastmaster to speak of Dr. McBrayer as a man. While many of you have known him longer and better and more intimately than I, to me it is absolutely certain that no one here has appreciated more his friendly qualities, his whole-souled helpfulness and big heartedness.

I truly consider Dr. McBrayer my friend and it is an inspiration of friendship that tempts me to say what I dare say to his face, before others.

If one quality were to stand out ahead of all others and if I was limited to one expression of his many qualifications as one beloved among men, it would be to tell you that Dr. McBrayer has a heart big enough to rank him as a leader among men and while he was ready to contend or fight for what he believed, he always had time to forgive those who assailed him, and speak kindly of them.

Undoubtedly Dr. McBrayer is a genuine lover of mankind and showed it by his actions, rather than by words. No one can say that gain of wealth, personal ambition or undue professional pride led him into the biggest of all his work, viz.: that of Health for the city of Asheville and now for the State of North Carolina, may we not hope even higher honors and a greater work await him?

Nothing but a big, generous heart would prompt a man to lay aside the more specific part of his chosen profession, his family responsibilities and many of the pleasures, unless he had a love for humanity.

As I am allowed then to pick out perhaps his foremost virtue and still may mention others, I would say that what he has done could not be accomplished without an intense ambition which has stimulated him to do his very best. Coupled then with an ambition to do his utmost from morning until late at night, with no other reward than having done work well for the good of humanity, little wonder the two put together makes success. A third qualification is the natural result of the two first and is success. "Nothing succeeds like success" and he is succeeding constantly.

Dr. McBrayer's contented home, ambitious children, who take their places at the head of their work; a large and increasing clientele, the accomplishment of perhaps more than has ever been done by one man for the health of Asheville and now, his call to a broader field, can have but one interpretation and that is, an unusually successful and useful career. Such would be wholly impossible without the great qualities of manhood.

Fortunately, as I said before, this is not an obituary resolution and we can say that this is but a pause before greater things. Thus far perhaps I may have confined myself to generalities and might now deal with intimate personalities, recalling things that we all know.

In his work Dr. McBrayer is a fearless fighter, convinced once of what he considers right, I have never known him to



falter on his way through although he sidesteps and tangoes wonderfully well.

To use his own words "he took sides" and I might say if everything appeared about equal, he usually took the weaker side, and with his help it usually won. He is no opportunist and didn't have to wait for a knocking at the door. It seemed that he made opportunities to do and carry on what he thought was right.

An extremely strong man himself, it seemed that he gave of his energy freely to those who needed it the most and not those who did the most for him.

Dr. McBrayer is a thirty-third degree, feather-edged politician of the honest type and when it came to oiling political machinery, his is the most perfect method I ever knew, it was a drop here and a dash there and everything moved on without the least sign of disorder. Like all successful leaders, he kept his word. All of us know where to place McBrayer and we never find him hanging on the coats of others or waiting for someone to pick him up. Rugged honesty and courageous conduct are as much a part of him as roots are to a tree.

I doubt if few are ever let into the hearts, desires and wishes of as many different kinds of people as Dr. McBrayer and thus I account for his legislative success. He knew people. The wisdom of his views and the rugged diplomacy of his actions land him as a rule on top and it takes more than the king's horses to get him down.

Dr. McBrayer had his hands on the pulse throbs of municipal affairs. He knew the needs, the abuses, the desires and pitfalls of Tom, Dick and Harry and everybody else. Little wonder then, that

a bill in his hands became a law and went through on "high" gear. He respected the desires, not of a few, but of all.

At the commencement of this speech I thought a few words would convey what I had to say of Dr. McBrayer but now I feel that I have not done him justice and as a matter of fact have gone beyond my allotted time.

In closing I have perhaps reserved what has been dearest and best to me and that is, his whole-souled friendship. He not only made friends but he kept them. He not only greeted them but he did for them and even though he might have rebuked them, there was no lasting sting prompted by selfishness or self-glorification.

Considering then this, it is not remarkable that so many of us should attend a banquet of this kind; neither is it remarkable that it is all prompted by good friendship, good-will and good wishes.

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## DR. L. B. McBRAYER AS A HEALTH OFFICER

BY DR. C. V. REYNOLDS

In 1910 Asheville was sadly in need of an organized, well equipped health department. She had good laws, willing workers, but no equipment and little money.

This was the situation. What was the remedy? To find a man—a man's man, a woman's man, a people's man, a civic man courageous, industrious, energetic, politic yet determined, with the power to prove to the powers that be, the importance, the imperative necessity of the prevention of disease.

Where was such a man? Gentlemen, it gives me a reflected honor when I say

that he was Buncombe born; and Buncombe should be proud of her son, L. B. McBrayer.

There has been an increase of \$10,-500.00 appropriated to the Sanitary Department during Dr. McBrayer's administration.

He has introduced sanitary surface closets where sewer and water are inaccessible. He has been instrumental in placing certified milk in Asheville which is a decided advance over other cities. He has perfected our meat inspection. He has established a city laboratory where milk inspection is much improved, quarantine and release of diphtheria, typhoid fever, and a check on tubercular patients, are scientifically controlled by laboratory methods which has done much to cause general attention done in sanitation in Asheville. He has installed a garbage incinerator which has been doing good work for some time.

He prepared at his own expense for a few issues the Asheville Health Bulletin—in fact to attempt to enumerate what has been done, is futile. One can only appreciate the great and sacrificing work done by Dr. McBrayer by spending a day in the City Hall and several around and about the city investigating his well organized health department.

It is with deep regret that we are to lose such an efficient officer and one can only have sympathy for his courageous successor—I say courageous, for the public is a severe critic and he will have to be brave to stand the fire; he will have to be able to say: Hurrah for ——— who cares for Fire?

## DR. McBRAYER, TRULY ALTRUISTIC

BY DR. C. L. MINOR

When I study the medical profession, there is nothing of which I am prouder than its altruism; the spirit of kindly helpfulness to others; the spirit which makes them work so hard to wipe out the very diseases by whose influence they have hitherto made their living. Every doctor worth the name is striving all the time to lessen the very conditions on which his livelihood depends.

I heartily agreed in all the admirable things said of Dr. McBrayer tonight. Having always taken a deep interest in health work and having been on the Health Board for a number of years under its father, Hall Fletcher, who did so much to start health work in this town, I have had an opportunity of understanding and judging the work that Dr. McBrayer has done since he has been here. I have seen also his admirable personal qualities which so many of you have referred to tonight; but when I see him now, with a good practice, and the prospect of much more if he were to work for it, lying in front of him, giving all this up altruistically in order to take up a work whose remuneration is small, even if its glory be great, I feel that he does honor to our profession and to himself.

He would indeed be a peculiar man if he did not feel an ambition to succeed in it, but no one can claim that this ambition is enough to compensate for the material sacrifices that he is making. We know that he would rather live in Asheville, where he has so many friends, than in Aberdeen. There he has a neglected work, which sadly needs attention and where he can do much for the suffering



poor of the State. Moreover he can, I am glad to say, push the very needed anti-tuberculosis campaign throughout the State. But no one could accuse him of that medical materialism which tempts so many of our profession to give up their time to the making of money rather than to helping their fellowmen.

We are proud indeed of the reputation he has made for Asheville already in his health work. The leaders in this work all over the country recognize it and admire it. At the Congress of Hygiene and Demography in Washington, his work was thoroughly recognized and admired, and Asheville has gained in reputation by the work that he has done.

We are sorry to lose such a man, and fond as we are of his successor, we realize how hard it will be to fill his place; and yet we are willing to give him up if it will redound to the good of the general health conditions of this State. May the work he is now taking up lead him far; may his success be great and may it never yet be so great as to cause him to forget the many friends in Asheville who will follow his course with sincere interest and justifiable pride.

#### DR. W. L. DUNN'S RESPONSE

Dr. Dunn, in response to the toast: "Dr. McBrayer, the Physician," said in part:

"How can one speak of the physician without speaking of the man?

"I envy my colleague who has spoken before me in his opportunity to speak of the man. Learning makes the M.D., but devotion to high ideals the man. Both of these are necessary to make the physician, but still they are not enough to make the

good doctor. Learning and high ideals must be guided by judgment. Judgment means an open mind. To all these, for the best results, must be added student habits, enthusiasm, tenacity of purpose, strength of conviction and industry.

"Those of us who have been fortunate enough to come into close contact with Dr. McBrayer have been impressed with certain aspects of this man's make-up. Perhaps nothing, however, has impressed us more than his open-mindedness, his ability to approach any subject without prejudice, the facility with which he would lay aside any preconceived idea, already formed opinion, and even prejudices, and finally, I may say even quickly, come to a proper conclusion entirely uninfluenced by these. \* \* \*

"I sometimes wonder if there are many people who know what an earnest, hard-working student he is. I dare say that there is not another member of our local profession who has the real student habits of Dr. McBrayer. His enthusiasm in anything he has undertaken has always been of such a character that one might call it really infectious. Once convinced of the rightness of his course, he has manifested a tenacity of purpose which could not be turned aside. \* \* \* All of these united with an unusual ability to work, has resulted in an unusual combination, in an unusual physician. \* \* \*

"His public work has been materially aided by his diplomacy, and I might add by his ability as a politician, because we must all admit that he is a past master in applied politics.

"When first I heard of his intention to go to take charge of the work at the State Sanatorium, I must confess that I

had some misgivings, but I have become convinced that my doubts were unfounded, that on the contrary, the very things which made one doubtful in this unusual man of brain and work, increased his fitness for the work, and would strengthen him in his hold upon the people and the profession. He will go into this new field without the fixed prejudices of any man who has gone through the struggle of the ups and downs of the past years in this field of work. \* \* \* His unusual open-mindedness, his student habits, his ability to come to correct conclusions, together with his natural ability, particularly fits him for his work. Again, anyone who has worked much with the tuberculous knows what an important thing is enthusiasm—that type of enthusiasm which is infectious, which infects the patient with a determination to get well, with a living interest in his fight, with a faith in what he is doing, with a faith in his doctor who ceases then to be a director to become a co-worker.

“His ability, his student habits, his humanness, his infectious enthusiasm, his capacity for work, his political acumen, must all make him an ideal man for such a position. \* \* \*

“Again we must not forget that the foundation of the treatment of tuberculosis is the very thing that he has been trying to teach us every day in his work—right living.

“So after all his training as a public officer of health will especially fit him for this work. This combination with his executive ability spells in big letters SUCCESS for Dr. McBrayer, SUCCESS for Montrose.

“I congratulate North Carolina, and I predict the time not far off when we shall have additional reason to point with pride to L. B. McBrayer, the man who did so much for the fight against tuberculosis in this State, and who placed the State Sanatorium of North Carolina among the foremost in this country.

“Gentlemen, in conclusion, I wish to congratulate the Buncombe County Medical Society, and to express my especial pleasure at having had the opportunity of being intimately associated with Dr. L. B. McBrayer for so long a time.

“And now our dear Mac, may God bless you, and give you the full measure of success you so richly deserve, and hear our prayers for you.”

#### AU REVOIR BUT NOT GOOD-BYE

In an impromptu response, Dr. McBrayer said:

Mr. Toastmaster, Mr. President and Gentlemen: Friends, I wish I might express to you my appreciation of this delightful banquet you have tendered me and much more especially the kind words of appreciation and esteem that you have expressed for me here this evening, but I am overwhelmed. However, I cannot let this occasion pass without saying that you have given me too much credit for the work that has been accomplished by our Health Department since I have been at its head. That I have tried very hard to do my duty, I admit and you all know full well, but I cannot admit that I deserve the credit which you have been so kind as to give me this evening.

There are many things that have made possible the work that has been done by our Health Department the last four years.



First, I would mention the foundation for this work, laid by my predecessors. Dr. M. H. Fletcher, who toiled for years with his massive brain and dogged determination, deserves much credit. While he did not accomplish what has been done in the last four years (no other man or set of men could have accomplished the work we have done, at that time) but he did his work and he did it well, and laid the foundation for the work which has followed, without which foundation the work of these latter years would have been impossible.

The same can be said of Dr. Carl V. Reynolds, who succeeded Dr. Fletcher, and whom I succeeded. For twelve years he labored and worked along the same channels. He built more securely the foundation—he laid the first stones in the walls of the structure. Without his work, the work which has followed would have been impossible.

Then there must be mentioned our mayor and board of aldermen. Unless they had had an intelligent understanding of the work and an appreciation of its importance and had lent their co-operation, certainly the work would have been impossible.

I would not be true to myself did I fail to give due credit to the force that have been associated with me, and while I cannot go into detail as to the work done by each one, I must express my appreciation of L. M. McCormick. He has made an intelligent study of health work in general and every detail in particular. He is a scientist by nature and training. His devotion to the health work of the city of Asheville and its growth has been little short of phenomenal. It seems to be his

first love—his only love, and not having a wife, he has devoted his splendid intellect and his very heart to this work as perhaps no one else could or would have done. He could be called upon any time, day or night, to do anything, and he was always ready and willing, and carried with him an intelligent understanding of it that is given to few men, in such varied lines, and it will be a sad day for the health work in Asheville when McCormick leaves it. All others connected with the work have been faithful and true.

Last and greatest, I would mention the co-operation of the medical profession of Asheville, than which there is none better. Without this co-operation, the work accomplished would have been impossible. With this co-operation, I don't see why any man might not have accomplished as much as I. I can only wish for Dr. Reynolds, who will succeed me, the same co-operation and support that I have received at your hands—he could not wish for more. I wish so much I might express to you, my friends, the appreciation I feel—but I can't.

## THE BULLETIN LOSES ITS FOUNDER

With the March publication the Bulletin lost its founder, Dr. L. B. McBrayer, who retires to accept the duties of Superintendent and Medical Director of the North Carolina State Tuberculosis Sanitarium at Aberdeen.

Under his able direction the Bulletin has made for itself a place of great usefulness, not as an exploit of Asheville but a stimulus to a higher plane of living, a constant reminder that man should not live for himself alone, but for community interests.

## Milk Test for Retail Dairies, March, 1914

	BACTERIA	*B. F.	†SP. GR.	°T. S.
Biltmore Certified.....	1,250	5.4	1.052	14.6
Biltmore.....	9,500	5.6	1.032	14.4
Edgewood.....	14,000	5.2	1.029	13.7
Violet.....	15,000	5.2	1.032	14.4
Anandale.....	19,000	5.2	1.032	14.1
Sunset.....	19,000	4.4	1.031	13.2
Oak Springs.....	20,000	4.8	1.032	13.9
Dryman's Mountain.....	21,000	5.0	1.029	13.5
Melrose.....	21,000	5.0	1.0298	13.9
Middlebrook.....	23,000	5.2	1.0295	13.7
Sevier.....	27,000	5.2	1.033	14.5
Pleasant Hill.....	30,000	3.8	1.029	12.0
Laurel Springs.....	32,000	4.8	1.0305	14.8
Fenner Farm.....	37,000	5.2	1.030	13.9
Locust Grove.....	40,000	4.8	1.029	13.2
White Pine.....	43,000	5.0	1.030	13.7
Wildwood.....	45,000	4.5	1.0325	14.5
Oak Grove.....	47,000	4.8	1.033	14.2

## Milk Test for Wholesale Dairies, March, 1914

	BACTERIA	B. F.	SP. GR.	T. S.
Scarborough.....	19,000	5.2	1.032	14.4
Elmer Carter.....	22,000	4.6	1.032	13.2
Emma Farm.....	23,000	4.6	1.032	13.6
Chas. Wilson.....	26,000	4.2	1.032	13.7
O. Baird.....	28,000	4.6	1.033	14.0
Swain.....	29,000	4.4	1.0295	14.6
Griffin.....	29,000	5.0	1.029	13.5
Calloway.....	30,000	4.8	1.0315	13.7
Honeysuckle.....	30,000	5.0	1.029	13.5
Nettles.....	33,000	5.2	1.029	13.7
J. V. Baird.....	35,000	5.3	1.031	14.2
Stony Knob.....	35,000	4.8	1.0315	13.7
W. A. Baird.....	42,000	5.0	1.032	12.1
Mountain Range.....	44,000	4.8	1.033	14.2
M. Greenwood.....	50,000	5.0	1.029	15.2

All Dairy Herds are tuberculin tested annually.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep the milk clean.

An average count of over 50,000 per unit would indicate careless methods.

\*Butter fat (legal minimum 3.25); †Specific gravity (legal minimum 1.029); °Total solids (legal minimum 11.75) indicate the chemical composition of the milk. Samples below standard would indicate adulteration.



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on

# BULLETIN

OF THE  
HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 40

Entered as second-class matter, September 28, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

May 1914

"ASHEVILLE opens wide her doors to the sick and the well from every clime, but she demands that the sick shall so comport themselves that they shall not become a menace to the health of her citizens or the stranger within her gates."



"Why don't they keep the streets a little cleaner?"

You ask with deep annoyance not undue,

"Why don't they keep the parks a little greener?"

Did you ever stop to think that THEY means YOU?



A germ in the human system does not wait for the showers of spring to sprout and grow, worst of all, to multiply.

Puzzle: Find the moral.



The secret of health is in nipping the bud, not the flower.





## Health Department City of Asheville

### BOARD OF HEALTH

MAYOR J. E. RANKIN, Chairman.

B. M. LEE, City Engineer.

C. W. BROWN, Chairman Finance Committee, B. of A.

W. R. PATTERSON, Chairman Sanitary Committee, B. of A.

DR. C. V. REYNOLDS. DR. E. B. GLENN

DR. W. L. DUNN.

### SANITARY COMMITTEE BOARD OF ALDERMEN

W. R. PATTERSON, Chairman.

R. L. FRANCIS.

C. W. BROWN.

### EXECUTIVE OFFICERS

C. V. REYNOLDS, M. D., Health Officer,  
Phones: Residence, 174; Office 15.

W. H. BIRD, Sanitary Inspector, Phones: Residence, 374; Office, 152; Stable, 294.

L. M. McCORMICK, Meat and Milk Inspector,  
Chemist and Bacteriologist, Phone 152.

ERNEST ISRAEL, Sewer and Plumbing Inspector.

W. FRANCIS, Water Superintendent.

**Population** { White - 15,000 } **20,000**  
                          { Colored - 5,000 }

### ABOUT FLIES

Remove the stable manure and you remove the dining room and cradle of the fly and prevent an untimely grave and incidentally a doctor's bill.

You are a good citizen and we believe you will do your part in rendering a real service to your family and your neighbor. If your neighbor is not a good friend to his family and yours, please telephone 152.

In an effort on the part of YOUR Health Department to reduce the number of flies this season, the following letter was written to all stable owners:

Dear Sir:

Your attention is called to the placard tacked on your stable in regard to the care of manure and the prevention of the development of the fly. Upon inspection it is found that your stable is not pro-

vided with a proper bin and your attention is called to this fact with the suggestion that you comply with the requirements on the placard within the next ten days. Please attend to this promptly and avoid placing the Health Department in the position of taking any legal steps to have this law carried out as indicated on the placard. No further notice will be given, but inspection will be made in ten days.

Trusting you will co-operate with the city, thereby aiding us in having a model town, I am,

Yours very truly,

C. V. REYNOLDS,  
Health Officer.

Ample time has been given us to anticipate the fly—are we ready for the fight?

Have we built our bins? Some have and others have not. What does this mean? It means law enforcement—it means embarrassment—it means added cost (a fine) to the delinquent. It is hoped that the delinquent will not be YOU.

"The place to fight the fly is where he breeds, not where he basks."

Protect yourself and your family against flies, and don't forget to telephone 152 if your neighbor has not protected his family and himself. Everybody—that means you—should do his or her part in the prevention of disease. It is a duty you owe to Asheville and it should be a pleasure to perform it.

Flies are winged carriers of disease, and what more could you expect of an insect devoid of intelligence, bred in filth, born in filth, fed upon filth, flying away laden with filth-producing germs?

Flies are more than annoyers of bald heads and sleeping babes—yes, they are indeed direct carriers of communicable diseases. Their home being in filth, they naturally like it and frequent visits are made from typhoid excreta to your milk, which is a great culture media for developing germs. From sputum to butter is another frequent flight. The sick are often annoyed by flies and from the sick to their excreta is a most convenient and attractive flight, and thence to you or me—will not self-preservation attract you?

Frequent journeys from your privy as well as from horse and cow manure, freshly-laden each trip with 350,000 poisonous germs to be deposited upon your foodstuff or perhaps from an infected sore to your child's innocent lips.

This article is nauseating, but necessarily so if the truth is spoken and most necessary it is to speak the whole truth when we trace too often sickness and crepe directly to the irresponsible fly.

Will you help us in the fight against the fly and in favor of your child?

## WHAT TO DO TO DESTROY THE FLY

### ELIMINATE THE BREEDING PLACES OF FLIES

The fly cannot develop from the egg, which must have undisturbed filth to grow in, in less than eight days; therefore, if all filth is cleaned up or destroyed at least once a week, the eggs will not have time to develop and there will be no flies.

"Keep garbage receptacles tightly covered, if possible protect by screens, so that flies cannot reach the garbage. See that collections are made promptly and

that no refuse remains upon the ground. If you live where garbage is not collected, then burn or bury it. Use chloride of lime freely in receptacles and about places where they are kept.

"Keep the stable clean, and place manure, old straw and other refuse of like nature in screened pit, vault, or they may be packed in tight boxes or barrels, which should be well covered. Use chloride of lime freely, and remove barrels or contents of pits once each week.

"Screen all privies, vaults, and vents to drainage structures. See that they never overflow, and use chloride of lime freely.

"Pour kerosene into drains, keep drainage systems in good order, and repair all leaks at once.

"Destroy the sawdust and ashes in cuspidors, they are unsanitary.

"Keep the premises clear from accumulations of rubbish of all kinds.

### PROTECTION AGAINST FLIES

"Screen windows and doors. If you can't screen the whole house, screen the kitchen and dining room. If you can't screen the kitchen, at least screen the food, especially the milk, and above all, screen the baby, its food, bottle and bed. Wire screens are the best, but mosquito netting can be used.

"Keep flies away from the sick, especially those ill with typhoid fever or consumption. Kill every fly that enters the sick room. Promptly disinfect all discharges from patients.

"Kill the flies as fast as they appear in the spring. The first flies multiply into millions in a season.

"When you see flies gathering on anything in your house or premises, remove



it. The most flies are always found wherever there is the most filth and dirt. A bad odor will attract flies and a clean odor, such as the fragrance of flowers, will drive them away. Keep everything clean, and starve at least some of them to death."

### STITCHES IN TIME

Had Father Noah been quite wise, he would have killed the pair of flies that roosted in the ark; he let that pregnant duty slide while he and Shem and Japhet tried to navigate their bark. Two flies were all there were, all told! And Noah might have knocked them cold with one good husky swat; he had the chance—he let it slip while he was mooning round his ship—the knowledge makes me hot! And ever since the sons of men have toiled and wrought and toiled again, to kill the measley flies; the more we kill the more we find, the more we knock the blamed things blind, the more their legions rise. We're all, like Noah, more or less responsible for the distress that makes all hope seem vague; we see some ugly things alive and let them live and grow and thrive until they are a plague. We calmly view the noxious week, and habits bad, and evil deeds which breed so fast! We let them grow and multiply as Noah did the fly and kick ourselves at last. "A stitch in time," the poet said (he had a long and shapely head) "will save you nine, by gum." And nothing truer will you find in all the years that lie behind, or all the years to come.—Walt Mason.

### DON'TS

1. DON'T forget to build a manure bin.

2. DON'T tolerate flies.
3. DON'T forget to kill the early fly and save 2,000.
4. DON'T forget the screens.
5. DON'T allow them in your house.
6. DON'T allow garbage, rubbish or manure to accumulate on your lot or your neighbor's—telephone 152.
7. DON'T allow flies near food, especially milk.
8. DON'T buy foodstuffs where flies are allowed.
9. DON'T buy milk where flies are on cans or bottles.
10. DON'T eat where flies are found.
11. DON'T forget to telephone 152 if there is a nuisance in your neighborhood.

### CIVIC BETTERMENT LEAGUE

The Civic Betterment League is lending every effort to aid the Health Department in maintaining Asheville in earning a reputation for well cleaned streets—well kept back yards, beautiful lawns, tastefully adorned with trees and shrubs.

Yes, we have a beautiful city—nature has done much for us, and it depends upon individual effort whether or not she becomes defaced. It would be well for us to remember when we have a marred beauty spot that I—which means you—did it. I—which means you—are wholly responsible for the defacement and I—which means you—should then and there undo the wrong.

A true citizen is a civic league worker, and should appoint himself a sanitary inspector. Does that mean you? You are proud of your neighbor's beautiful home—is your neighbor proud of you? Each

individual should take pride and a personal responsibility in Asheville's civic condition. My conscience does not smite me—does yours you?

Asheville has plenty of laws to enforce sanitary measures, but laws are made for the lawless. Are you a lawless citizen? A clean city today does not mean a clean city tomorrow any more than a clean face today means a clean face tomorrow. After all it devolves itself into an individual effort, voluntary or by law. I—which means YOU—would feel chagrined if BY LAW I was forced to keep his premises clean.

The Health Department is going to do its duty. Notice: Find answer.

#### PLATFORM OF C. B. LEAGUE O. A.

The Civic Betterment League of Asheville proposes to bring about:

1. Perfect cleanliness, which means
  - (a) Free collection of garbage.
  - (b) Clean streets and sidewalks.
  - (c) Clean vacant lots and alleys.
  - (d) Covered trash wagons.
  - (e) Abatement of the smoke nuisance.
2. Perfect sanitation, which means
  - (a) Rigid inspection of restaurants, fruit stands, bakeries and groceries, as well as dairies and meat markets.
  - (b) The enforcement of the expectoration ordinance.
3. A beautiful city, which means
  - (a) The painting of houses, the planting and adorning of lots and yards.
  - (b) The removal of billboards.
  - (c) The prohibition of the distribution of dodgers which litter the streets.
  - (d) The beautifying of vacant lots and their utilization as gardens.
4. The childrens' welfare, which means

- (a) Free playgrounds and plenty of them.

- (b) More and better parks.

- (c) The training of citizens through the organization of junior civic leagues.

The members of the executive board that formulated and adopted this platform are as follows:

President, Mrs. Leroy A. Farinholt; vice-president, Mrs. Robert S. Carroll; recording secretary, Mrs. H. Taylor Rogers; corresponding secretary, Miss Annie Oakley; treasurer, Mrs. W. B. Northup; chairman committee on streets, alleys and vacant lots, Mrs. Whitefoord Smith; chairman committee on sanitation, Mrs. James W. Shaw; chairman committee on trees and floral culture, Mrs. Alexander Cowley; chairman committee on laws and legislation, Mrs. J. A. Sinclair; press and publication, Mrs. Mary C. Robinson; chairman committee for the organization of the junior civic league, Mrs. Ralph E. Lee.

#### ASHEVILLE IS CLEANER THAN EVER BEFORE

That Asheville is considerably cleaner this year than the city has been in past years is evidenced by the small amount of trash gathered thus far by the wagons of the sanitary department, which are moving rubbish free of charge during the present week. Never before has Asheville set aside an entire week for her annual renovation, but three days having been given to the task heretofore. At the close of the three days observed as cleanup days last year more than 400 wagon loads of rubbish had been collected. After three days this year, however, but forty-five loads have been gathered. According to Sanitary Officer W. H. Bird, this is due



to the unusually small amount of trash which has been set out for the drivers this year.

The small showing is in no way attributable to the failure of the residents of the city to co-operate with the city authorities in making Asheville a cleaner city for the cleaning up of property has been more general this year than ever before. It is attributed solely to the fact that at the beginning of clean-up week, Asheville was cleaner than ever before.

In order that Southside avenue may present a more attractive appearance, the tin cans and other rubbish of this kind collected during the present week is being dumped into the gulleys running parallel with the sidewalks on that street. These gulleys will be filled and earth will be placed over the rubbish. Grass will be sown and the street will look much better as the result of the decision of Captain Bird to add to the appearance of the street rather than haul the cans to the city incinerator. Garbage, however, is being burned, the gulleys being filled with material which can not become a nuisance from a sanitary standpoint.

The gulleys on Southside avenue, over which street thousands of visitors each year go from the Southern passenger station to their hotels and boarding houses, have given the sanitary department much trouble in the past. They have been regarded as the best resort in the city for the members of the mosquito tribe and many visitors have been heard to comment on the unsightly appearance of the street.

The improved civic condition of the city this year is largely due to the determination of the residents of Asheville to keep the city spick and span at all

seasons of the year. The sanitary department has hauled many wagons of trash away during the past year and the civic betterment league has played no small part in getting Asheville property owners to put their premises in good condition.

The thoroughness with which Asheville cleans up annually has given the metropolis of the Land of the Sky a great deal of favorable publicity. The resolutions recently adopted by the board of trade urging all of the people of the city to co-operate in making the movement a successful one have been distributed throughout the country and have been commented on by several newspapers. One of the papers to take these resolutions as a subject for an editorial is the Athens Daily Herald, which reproduces them and urges the people of the Georgia city to inaugurate a similar movement.

### EVER AND ANON

Late to rise and late to bed,  
Makes a man dopy and queer in the head.

\* \* \*

The early bird catches the worm, but  
did you ever stop to think what the early  
worm catches?

Which are you?

\* \* \*

"There is nothing the matter with  
you," persisted the Eddyite, "absolutely  
nothing; can I not convince you?"

"Let me ask you a question," replied  
the sick man.

"A thousand if you like."

"Well, suppose a man has nothing the  
matter with him and he dies of it, what  
didn't he have the matter with him?"

—Philadelphia Press.

## ALDERMAN STIKELEATHER'S CHARLOTTE ADDRESS

Was Well Received at Congress of Municipal Officers—Health Department's His Subject.

On May 15th, Alderman Stikeleather spoke at the Charlotte meeting of municipal officers of North Carolina.

His address was regarded by those present as being one of the ablest which was delivered at this gathering and was listened to with rapt attention.

In part, Mr. Stikeleather said:

"The gathering here of municipal officers from many points in North Carolina affords discussion of various branches of City Government, but no subject will be treated which protends for civic betterment in greater degree than the municipal health departments. Twenty years ago, little or no attention was given to the control of public health as a co-ordinate part of a city's government, but time and experience have demonstrated the necessity of inseparably linking this department with the financial and executive branches of all towns, and wise legislative enactments have come to safeguard and strengthen the efforts of those officers who are entrusted with matters pertaining to public health.

"In Asheville, the little Gem City of the Mountains, we have fought and won the battle which for years has waged between the health-seeker and the public good, and by untiring efforts we have arrived at a solution which permits of every opportunity for enjoyment of the life-giving properties of our pure air to those who seek it, without inconvenience or annoyance to the visitor who comes on

pleasure bent, or to the permanent residents of our town. Persons who enjoy the health-giving and health-protecting climate of any town should be willing to conform to all reasonable regulations which serve as a safeguard to everyone. Co-operation should exist at all times between the Health Department of all towns with its citizens.

"The Mosaic laws taught the art of health, and made it a part of the religion which was then embraced, until each century has recorded its own achievements, and today the quick eye of science has brought us face to face with the revelations of the age.

"In the succeeding agnostic and materialistic ages this religious element disappeared and personal liberty became paramount. It then became necessary to establish laws for the protection of the community against the individual, thus was the laws for the protection of health.

"Like many urgent and engaging economic questions of today, sanitary and health laws have become interwoven with politics and it is encouraging to find the emphasis given this subject by President Woodrow Wilson in his inaugural address, when he said: 'Sanitary laws, pure food laws, and laws determining conditions of labor, which individuals are powerless to determine for themselves, are intimate parts of the very business of justice and legal efficiency.' Again, here in North Carolina, in the magnificent address of Governor Craig, at Raleigh, following the political and economic slogan of 'Forward is the order,' we find North Carolina's Chief Executive exhorting the public to better health and sanitary concernor Craig predicts the quickening of public mind and thought along health



lines until every home and hovel is provided with wire screens for its windows and bath tubs for the 'men and children.'

"It is with pardonable pride that I refer to the growth and present excellent condition of the Health Department of Asheville. This department consists of eight members, three of whom are members also of the Board of Aldermen, while the remaining membership consists of the city engineer and four physicians. Alderman W. R. Patterson, Chairman of the Sanitary Committee of Asheville's Board of Aldermen, is essentially the accredited representative on the Health Board from the city administration and lends every encouragement to any advancement in this department.

"Twenty years ago our far-seeing townsman and physician, Dr. M. H. Fletcher, perceived the necessity of perfecting better health regulations for Asheville and through his zealous effort a stimulus was given to this enterprise. The energy and labor of Dr. Fletcher was inherited by Dr. Carl V. Reynolds, who next became the Health Officer for Asheville, and to whom should be credited the conception and enactment of the helpful and beneficial health laws now in use. Dr. L. B. McBrayer, who has recently become Superintendent of the State Sanatorium for Tuberculosis, succeeded Dr. Reynolds and gave to the service his untiring efforts. The indefatigable energy of Dr. McBrayer secured the financial assistance and practical equipment necessary to effectuate the laws designed by his predecessor, Dr. Reynolds. Dr. Reynolds upon the retirement of Dr. McBrayer is again Asheville's Health Officer and now aided by statutory laws and machinery, gives promise of maintaining

the high order of service which he himself predestined and which is now so admirably established. These three well equipped physicians have in turn brought the Health Department of Asheville from small beginning to proud eminence of possibilities which we today enjoy.

"The most reasonable and effective health laws, I now apprehend, can best be found in Asheville. Our quarantine law, which exists today, conforms to the very latest scientific researches and is rapidly demonstrating its efficiency in checking the ravages of disease. One feature of this helpful law is the control of cases of diphtheria by laboratory methods, which enables the release of a quarantined patient upon the disappearance of the germs. Under the former law a patient was held empirically for four weeks and then released, when perhaps he was still a menace to the community, or when perhaps his release would not have endangered the public at an earlier date.

"The inspection and rigid control of all milk and meat is assured under a law which protects the seller and the public alike. This department is under the supervision of Mr. L. M. McCormick, whose training as a biologist at the National Museum at Washington and in museum work in New York City, peculiarly fits him for its engaging and intricate duties. All dairy herds are tuberculin tested annually and the process of eliminating infected cows has brought all herds in Buncombe County now to a state of perfection and this test has proven the practicability of permanently freeing the cows from tuberculosis.

"Strict sanitary inspection of all surface points where typhoid germs are disseminated, has resulted in a precipitate

reduction of the per cent of sickness from this cause, and has incidentally been a cause of monetary saving to our town. The anti-expectoration ordinance further secures the public from possibilities of contamination and the public drinking fountains located conveniently for use afford the advantages of the individual cup, which has been so urgently advocated by the medical profession.

"The incinerator, recently erected, receives all garbage and changes same from poisonous and infectious substance to sterile cinders.

"We invite you to inspect our exhibit which is here under the management of Mr. McCormick, who will gladly explain it to you and which demonstrates the effect of our efforts, and which it is hoped will serve to influence and encourage the enactment of similar sanitary laws in different localities.

"So wholesome has been the effect on the public by reason of the administration of health laws in Asheville that there is now an insistent demand for continued activity and unabated zeal. Indeed is the spirit of co-operation manifest between the department and the people. This co-operation is encouraged by a spirit of approval in our Board of Trade and other civic institutions.

"While the high measure of success in our Health Department is primarily due to salutary laws and the unremitting zeal of officers, still we are not unmindful of the advantages obtained through the irreproachable water supply, which comes to Asheville in sparkling purity, from the home of speckled trout some twenty miles away. This crystal stream is brought through iron arteries, over hill and dales, and through fields of waving

grain to the happy homes of our people.

"It is perhaps not a diversion from my topic to speak for a moment of this widely advertised system. The headwaters of the beautiful Swannanoa, which in the Indian Venacular means, 'Nymph of Beauty,' are lifted from its course under the dome of old Craggy and by gravitation is sent rushing to our town. This water supply is guarded with every precaution from contaminating influences. The city's wardens keep constant watch at the 'intake' and are zealous to discover any depredations of the protecting woodland. By wise purchases we have acquired the mountain slopes surrounding this watershed and with an area of some ten thousand acres the purity of the stream and the integrity of its channel is preserved.

"For many years the question of an abundant water supply for Asheville was uppermost in the minds of the people and was particularly the one problem with which each succeeding administration struggled until in 1093 Mayor Charles T. Rawls perfected the present efficient system. It was Mayor Rawls who conceived the idea of converting a mountain stream into a water supply for Asheville, and it was he, too, who carried to successful completion the installation of the pipe line system. When the plan was deemed a practical one, the city was tax-ridden and with revenue impaired, but by the remarkable business genius of Mayor Rawls, funds were readily procured and the line constructed.

"This permanent supply of the purest water on earth is the chief asset we have and it shall ever remain a monument to the combination of remarkable foresight and business acumen of one of Ashe-

ville's most useful Mayors.

"Mr. Chairman and gentlemen of this Convention, on behalf of Mayor Rankin and the city of Asheville, I wish to felicitate you upon the spirit which prompts this meeting. I have listened with profit and entertainment to what has been said here and I will carry back to my mountain home, the most pleasing and cordial recollections of my stay. I hope the association of Municipal Officers of North Carolina will increase in membership and that much more may be added to its established usefulness."

### A BIG FLY

Many thousands of people have seen the big glass mosquito at the American Museum of Natural History in New York. Now, it has a companion in a house fly sixty-four thousand times as big as the one we are so often adjured to "swat" or "starve." This model has cost nine months of work and study on the part of Ignasz Matausch, a Hungarian model maker in the service of the museum. The proportions have been preserved with the minutest care, Mr. Matausch having made his drawings and casts for the head, body and various members of the insect from dissection. Larvæ and pupæ of the fly are shown in models molden on the same scale, as are the eggs, which appear as little cucumber-shaped pieces of paraffin about two inches long. A real fly's egg is just about visible to the naked eye. The same artist has painted an enlargement (fifteen hundred diameters) of the hairy foot of the fly, showing the typhoid bacilli, of which the insect is the common carrier, on the clawlike tip of the member.—The Outlook.

### IMPORTANT

Flies breed in garbage, manure, and other filth, and flies carry typhoid fever, tuberculosis, chicken-pox and many other communicable diseases. The fly lives over the winter in warm places—the furnace room, crevices, etc. "Swat" the fly now and have a flyless house in summer.

### DEFINITION OF A PATHOLOGIST

"Pa," asked Jimmie, "what is a pathologist?"

"He's a man who lays out paths in parks and elsewhere, my boy. Now, don't bother your papa any more; he's busy."

\* \* \*

Bickering, M.D.—"Would you have the price if I said you needed an operation?"

Manning—"Would you say I needed an operation if you thought I didn't have the price?"—Life.

### MY FIRST YEAR

BY LEONIDES TEETHER

In all due modesty I wish to map a brief record of my achievements during my first year in household affairs.

I control the heads of all departments.

I have bulldozed the doctor and nurse.

I have cut one tooth.

I have furnished an unfailing topic of conversation.

I have been written up by a sociological expert.

I have put the local drug store on its feet.

I have helped out the gas company.

I have achieved a first-class reputation as an orator.

I have inaugurated a new milk supply.

I have put down several severe insurrections of colic.

While I am not yet on my feet, I expect to be president some day.—Life.



**Milk Test for Retail Dairies, April, 1914**

	BACTERIA	*B. F.	†SP. GR.	°T. S.
Biltmore Certified.....	1,100	5.	10.346	14.6
Biltmore.....	3,300	5.	1.034	18.6
Oak Springs.....	15,000	4.4	1.034	13.8
Anandale.....	17,000	4.	10.318	13.7
Violet.....	20,000	5.	1.030	13.7
Sunset.....	22,000	4.2	1.034	13.7
Dryman's Mountain.....	25,000	5.8	1.0295	14.2
Edgewood.....	27,000	4.6	1.029	12.9
Middlebrook.....	27,000	5.2	1.032	13.8
Laurel Springs.....	28,000	4.4	1.0306	13.
White Pine.....	28,000	5.8	1.0295	14.9
Pleasant Hill.....	30,000	4.4	1.029	12.7
Mountain Range.....	33,000	4.4	1.029	12.1
Oak Grove.....	37,000	4.0	1.033	13.3
Sevier.....	40,000	4.2	1.034	13.7
Locust Grove.....	50,000	4.0	1.0318	12.7
Melrose.....	59,000	4.0	1.03	12.5
Fenner Farm.....	60,000	4.6	1.034	14.4
Wildwood.....	75,000	4.6	1.032	13.7
Swannanoa Dairy.....	120,000	4.6	1.032	13.1

**Milk Test for Wholesale Dairies, April, 1914**

	BACTERIA	B. F.	SP. GR.	T. S.
Griffin.....	15,000	4.4	1.030	13.2
Scarborough.....	16,000	4.6	1.032	14.4
Emma Farm.....	18,000	5.	1.031	13.7
Emma Farm.....	18,000	5.0	1.031	13.7
Hill Farm.....	18,000	18.0	Cream	
Garrison Bros.....	21,000	4.8	1.032	13.5
W. H. Gaddy.....	25,000	4.6	1.032	13.7
Geter Greenwood.....	30,000	4.6	1.029	12.9
J. V. Baird.....	35,000	5.3	1.031	14.2
McCall.....	35,000	5.4	1.030	14.2
Stony Knob.....	39,000	4.4	1.029	12.7
Chas. Wilson.....	42,000	4.0	1.032	13.
M. Greenwood.....	43,000	4.1	1.029	12.4
Elmer Carter.....	45,000	4.6	1.032	13.8
Nettles.....	45,000	4.0	1.028	12.0
Honeysuckle.....	50,000	4.2	1.029	12.9
Carter Bros.....	50,000	4.4	1.032	13.7
O. Baird.....	61,000	4.8	1.032	13.7
Swain.....	66,000	4.8	1.032	13.8
Calloway.....	80,000	3.6	1.032	12.4
J. V. Baird.....	80,000	4.2	1.032	13.2
W. A. Baird.....	130,000	4.2	1.032	13.2

All Dairy Herds are tuberculin tested annually.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep milk clean.

An average count of over 50,000 per unit would indicate careless methods.

\*Butter fat (legal minimum 3.25); †Specific gravity (legal minimum 1.029); °Total solids (legal minimum 11.75) indicate the chemical composition of the milk. Samples below standard would indicate adulteration.

"As long as my offspring are safe, what difference does it make how many of us old ones die"?

## A FLY'S FILOSOPHY



# MY HANDIWORK

(Courtesy Greenville Board of Health)

I hide my young in man's filth—and he—because he is lazy—and too "nice" to keep his surroundings clean, raises my babies for me!

He says he hates me for my dirty habits—it is to smile!

Hate kills no one, not even a fly.

—A Fly's Philosophy.

# BULLETIN

OF THE  
HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 41

Entered as second-class matter, September 28, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

June 1914

"ASHEVILLE opens wide her doors to the sick and the well from every clime, but she demands that the sick shall so comport themselves that they shall not become a menace to the health of her citizens or the stranger within her gates."



To be light and airy, flood the home with sunshine and fresh air.



Temperance and Labor are friends to man.



A man is known by the yard he keeps.



A welcome extended to the fly is an invitation for a doctor's bill. And more serious still, an undertaker's bill.





## Health Department City of Asheville

### BOARD OF HEALTH

MAYOR J. E. RANKIN, Chairman.

B. M. LEE, City Engineer.

C. W. BROWN, Chairman Finance Committee,  
B. of A.

W. R. PATTERSON, Chairman Sanitary Com-  
mittee, B. of A.

DR. C. V. REYNOLDS. DR. E. B. GLENN.

DR. W. L. DUNN. DR. A. W. CALLOWAY.

### SANITARY COMMITTEE BOARD OF ALDERMEN

W. R. PATTERSON, Chairman.

R. L. FRANCIS. C. W. BROWN.

### EXECUTIVE OFFICERS

C. V. REYNOLDS, M. D., Health Officer,  
Phones: Residence, 174; Office 15.

W. H. BIRD, Sanitary Inspector, Phones: Resi-  
dence, 374; Office, 152; Stable, 294.

L. M. McCORMICK, Meat and Milk Inspector,  
Chemist and Bacteriologist, Phone 152.

ERNEST ISRAEL, Sewer and Plumbing Inspector.

W. FRANCIS, Water Superintendent.

Population	{	White - 15,000	}	20,000
		Colored - 5,000		

### STIMULATING ENCOURAGEMENT

In the editorial columns of the Asheville Daily Citizen and Gazette-News there appeared two articles, one entitled "Discussing Flies," the other, "Births and Deaths," written by Mr. J. H. Caine, Editor, and one "A Needless Inquiry," written by W. A. Hilderbrand, Editor.

So good were they and the great good such articles are to the community, it is with pride and pleasure that we reprint them in the Bulletin to be placed in our permanent records.

If other citizens from time to time would give us such articles, great aid and stimulus would be given to the Health Department.

#### Discussing Flies

We come now to a discussion of our annual visitor, the house fly, that winged pest against whom perpetual war is waged, but whose tribe never grows less. He, or she, is here in spite of all the indictments returned; in spite of the fact

that flies of every description have been hurled beyond the pale of civilized society. Press and pulpit, and the higher professions have denounced the fly in unmeasured terms, but still he is here, living on the fat of the land.

The menace of the fly, seriously speaking, is not one to be ignored. The highest scientific authorities have shown beyond a doubt that many of the ills to which flesh is heir are borne hither and thither by the fly, and to his operations can be traced much needless mortality among infants and even larger children. What the fly does to the adult race may be a matter of speculation, but enough is known in connection therewith to show that every precaution, and all available energy should be employed against "musca domestica."

The fly is everywhere; we find him in the homes, in the schools, in the churches, and even in the stores. It is true that strong efforts are being made to keep him off the city's food supply in the various establishments, but it is almost a hopeless task.

We do not take the fly and his dangers seriously enough. Some months ago a gentleman writing to The Citizen declared that if a rattlesnake were turned loose on Pack square, nine-tenths of the population would spend the next six months looking for rattlesnakes, expecting every moment to be stricken by the deadly reptile. "Still," the writer continued, "if statistics were available, I venture to state that they would show that one thousand people are killed by house flies where one falls a victim of the rattler." The Citizen believes that the point is well made. We tolerate the fly because he has been always with us. That is one reason why countless homes, or rather the families occupying them, refuse to make a small investment for window screens and door screens. By the same reasoning the value and effectiveness of the "fly swatter" is ignored. Let us all get busy and "swat," even if we do not screen.

### Births and Deaths

While there hasn't been much fuss made about it, the last session of the North Carolina legislature enacted into a law a bill which provided for the registration of vital statistics—births and deaths. Marriages, of course, had been registered long before the legislators awoke to the fact that the proper recording of births and deaths was just as essential to the rights of citizenship, but though the press and certain public spirits had moved in the direction of giving North Carolinians a birthplace, and also a place to die, vital statistics were not considered as being of more than ordinary importance.

But the fact remains that today North Carolina registers her births and deaths, and she is proud of that fact, for all reports go to show that much depended and does depend upon such registration. Asheville is doing her share in this good work, but The Citizen has received reports to the effect that certain doctors in the country districts of Buncombe are not complying with the law, either through ignorance or obstinacy, or both. Gentlemen of this class should be attended to, for their failure to report births and deaths is a clear violation of the law. Even if there were no such law, it would still be their duty to make such reports.

The chief clerk of the vital statistics of the North Carolina board of health recently declared that registration of births and deaths was of vital importance to the welfare of the state. "Birth certificates," he said, "will save thousands of legal complications and other difficulties. They will prove legitimacy, lawful age to attend school, to work in factories, to marry, to vote, to hold office, to pay taxes, to enter into contracts, to obtain life insurance, establish inheritance claims, trace lineage, and so on. Death certificates will furnish proof for insurance claims, show cause of death, prevent crimes, and, best of all, show the value of health work."

The doctors of this city and other sections who are earnestly trying to do their part in making the vital statistics law a success should make every endeavor to force the shirkers into line.

### A Needless Inquiry

Representative Moore of Pennsylvania has introduced an anti-mosquito bill in congress. He asks for an appropriation of \$100,000.00 to be expended by the public health service to determine the extent to which mosquitoes transmit disease and are a menace to the human race. When this is done, he wants the federal government to co-operate with the state and municipal authorities in exterminating the disease-carrying mosquitoes.

It seems rather unnecessary to spend any more money in such investigations after what Col. Gorgas and his medical staff discovered in Cuba and Panama about anopheles, stegomyia and other varieties of mosquitoes, and what they did in the canal zone particularly to make fever-haunted swamps habitable and healthful. We don't need to make any more inquiries into the habits of mosquitoes. Mr. Moore can get all the information he wants by sending across Capitol park to the congressional library. Anybody else can doubtless get the same information in his own city.

As for exterminating the mosquitoes, the thing is simplicity itself. The only mystery involved is the peculiar kink in human nature that keeps people everywhere from applying so simple a remedy. It's an old story, but worth repeating until something is done about the matter.

If you don't want to be chewed up by mosquitoes, with the possibility of malaria or yellow fever or blood poisoning, drain the swamps and stagnant pools where the insects breed. If you can't drain off the water, just pour a little kersoene over it every week or two. That's all there is to it.

## REMOVAL OF GARBAGE

The city of Asheville, through her Sanitary Department, is paying by a special appropriation for Market House, Abattoir, Restaurant, Stable and back yard inspection.

By the same means we are flushing, sprinkling and otherwise cleaning our streets. This is a service rendered for the special benefit of no one in particular, but for the public in general, a work "for the people and by the people."

Being progressive in nature, we were not satisfied and more money was called for to remove waste and garbage from all improved property in the city of Asheville, thinking this a service to the individual, for the special benefit of the individual and garbage being removed from private property for a private individual should be paid by that individual for special services rendered.

Below will be found the ordinance which is now a law and will be put in force as soon as arrangements can be perfected for the best and most economical way of removing same.

Just here let me beg of you to aid us in burning promptly all waste that can be destroyed in this manner; and again, remove all water from the swill before placing same in cans—with lids—for the garbage collector. A good way to remove this waste is to have a wire basket over the sink and allow all waste to run thru kitchen sink, then wrap the contents of the wire basket in paper before placing in the can with a lid: the result will be a great saving to you and will mean fewer flies and fewer mosquitos and less expense.

## NEW SANITARY TAX

The Board of Aldermen of the city of Asheville do ordain:

SECTION 1. That the ordinance passed on its first reading May 22nd, 1914, and known as the Sanitary Tax Ordinance be amended to read as follows:

"SECTION 1. That all improved property in the city of Asheville shall be charged annually with the following assessments, which are hereby levied for the purpose of defraying the cost of collecting, removing and disposing of all garbage, night soil, and all other waste and decaying matter found upon such property, to-wit: Upon all property upon which there is a building used exclusively or principally as a residence there shall be levied and collected as other taxes the following amounts based upon the valuation of said improved property for the purpose of ad valorem taxes, viz:

ASSESSED VALUATION	ANNUAL ASSM'T
\$ 500.00 or less	\$ .75
500.00 to \$1,000.00	1.00
1,000.00 to 1,500.00	1.25
1,500.00 to 2,000.00	1.50
2,000.00 to 2,500.00	1.75
2,500.00 to 3,000.00	2.00
3,000.00 to 5,000.00	2.50
5,000.00 and over	3.00

Upon all boarding houses with less than 10 rooms the foregoing rates shall be charged, but upon all boarding houses with 10 or more rooms, the following assessments are hereby levied, viz:

10 to 20 rooms.....	\$ 4.00 annually
20 to 30 rooms.....	6.00 annually
30 to 40 rooms.....	8.00 annually

Upon all hotels classified by the Board of Aldermen the following assessments are hereby levied, viz:

Class A.....	\$24.00 annually
Class B.....	20.00 annually
Class C.....	16.00 annually
Class D.....	12.00 annually
Class E.....	10.00 annually
Class F.....	8.00 annually

Upon all business houses within the fire limits of the city of Asheville there is hereby levied the sum of \$3.00 annually per 25 feet front of said building, and at the same pro rata rate for each front foot thereof, and \$2.00 per 25 feet front upon all such buildings outside fire limits, and



at the same pro rata rate for each front foot thereof.

SEC. 2. That the City Auditor, or other person, in making up the tax-books of the city of Asheville annually, shall include in the total amounts levied against all property subject to the provisions of this ordinance the amounts hereintobefore stipulated, and the same manner as other taxes.

SEC. 3. That all ordinances and clauses of ordinances in conflict with any of the provisions of this ordinance be and the same are hereby repealed.

SEC. 4. That the foregoing ordinance shall be in force and effect from and after the date of its final passage.

### MOSQUITOES—WHY HAVE ANY IN ASHEVILLE?

While mosquitoes have been, at times, encountered in droves in almost all sections of the world, the natural habitat or home of the mosquito is in temperate and hot climates or tropical countries, marsh lands, low lands, swamps and jungles where stagnant water is prevalent.

Great good has been accomplished in the anti-mosquito crusade in New Jersey, California, Havana, Panama, Vera Cruz, etc., not with the hope of annihilation, but simply to control.

Vast sums of money have been expended in the fight against the mosquito, saving thousands of deaths from malaria and yellow fever, and who will say that it was not WELL spent?

Asheville is not the home of the mosquito, and previous to the railroads the mosquito was unknown, and today so far as the records can show, the native mosquitoes are only annoyers of sleep and rest, leaving behind them some discomfort following their bite.

But why this? And who knows when the "lady," who is a carrier of the malarial germ from a malarial district, will bite, seeking revenge from being imprisoned in some visitor's trunk? You may be the victim. Swat her!

Asheville's topography is antagonistic to the mosquito, and the neighborhood in which the pest is found is due to that neighborhood's carelessness and most generally to an individual rather than to the neighborhood as a whole.

See that your premises are free from mosquitoes, by seeing that there is no STAGNANT WATER in your yard, no tin cans to furnish breeding places, no gutters that fail to completely drain, no flower pots or vases with stagnant water, and you will not be bothered this summer. Will you do your part?

While it is true, to a large extent, that the individual householder furnishes his rearing places, in cities the size of Asheville, his neighbor's mosquitoes may trouble him, so we must have community help, community interest excited to arouse the public interest in this crusade. Create a sentiment. Who will help? I know the Civic League will be after you if mosquitoes are reported; this will be embarrassing. Do your duty for the community's sake, it will cost you nothing and your conscience will be the better for having accomplished something. Just think, you will have done a real service to your fellowman. Do it. Start now, it only requires a little of your time and what a comfort it will be to you and your neighbor, to your innocent baby and your neighbor's baby.

Have a pride in your city and it will reflect credit on you.

### "HOW FAR WILL MOSQUITOES FLY?"

The question is often asked: "How far will mosquitoes fly from their breeding places, or how far can they be driven by the wind?" In some instances this becomes a matter of practical importance, since if mosquitoes fly great distances, exterminative work on the breeding places near a house or community will be of comparatively slight avail. There exists on this point a difference of opinion. In a discussion at the meeting of the Asso-

ciation of Economic Entomologists at Boston, in August, 1898, Dr. John B. Smith stated, in referring to the possibility of mosquitoes being carried by strong winds to considerable distances, that he had noticed that they would not rise or take flight when a brisk breeze was blowing, and that even a comparatively slight breeze will keep them from upper stories in houses. He, therefore, doubted the wide distribution of mosquitoes by high winds. Dr. H. T. Fernald stated that at Cold Spring Harbor, Long Island, with a north breeze there are no mosquitoes. With a south breeze, on the other hand, they are often very troublesome, especially after a prolonged gentle wind of five or more hours' duration. There are no pools in the center of the island, and the mosquitoes are supposed to have been carried from the south shore, a distance of some fifteen miles. This question became a very practical one to the members of the Richmond County Club on Staten Island, in their operations against the breeding places of mosquitoes on the island, since, if a new supply could be carried over by the winds from the New Jersey coast nearby, a large portion of their labor would be wasted. Mr. W. C. Kerr, the originator of the mosquito work at that place, and an excellent observer, is decidedly of the opinion that mosquitoes are not brought over from New Jersey.

Almost everyone must have noticed the habit of mosquitoes of clinging to branches of trees and grasses during a high wind, swarming out in flight as the wind subsides, but there must be instances when they are greatly aided in spreading by such gentle winds as those mentioned above by Dr. Fernald.

In this connection an observation made by Mr. R. M. Reese in Baltimore is significant. He found that by treating the privy vault in his backyard with kerosene, the supply of mosquitoes to the house was greatly reduced, although

there were many other breeding places only a little farther removed.

Another significant instance was mentioned by Prof. Herbert Osborn at the Boston meeting of the Association of Economic Entomologists. He said that in dry seasons the small pools within a quarter to a half a mile from the college buildings at Ames, Iowa, dry up and the mosquitoes disappear, in spite of the fact that within about a mile there are large pools which never become dry.

When it is remembered that there are some forty separate and distinct species of mosquitoes found in the eastern limited States, and that these forty species differ as much in breeding habit, habitat and local abundance as do any forty species of birds, it will be seen that the individual species found in any locality must be recognized before a prognosis as to "how far mosquitoes can fly" can be made.

It is well recognized now that the species of mosquito that fly long distances from their breeding places are salt marsh breed and that those species that breed in sweet (fresh) water, such as rain water, fly only a comparatively short distance, so that any locality that is outside the range of the "tide-water" species, say fifty miles from salt water, can control their mosquito situation by local methods.

If a mosquito bothers you, look on your own premises for the cause—and remove the cause.

### AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE

There is absolutely no excuse for a case of typhoid fever in Asheville and if a case should develop you can rest assured that it is due to carelessness of the individual. We have not had but two cases in our city in the past eight months and these occupied the same room and worked in the same establishment.

Every investigation possible was made to ascertain the source of infection but

without avail. These parties have only been in Asheville about two months and the Health Department has come to the conclusion that one or the other must have been a carrier and from this source the case of true typhoid fever developed.

We are proud to say that there are only about ninety-five surface closets in the city of Asheville accessible to sewer and water and immediate steps are being taken for their connection within the next twenty days, and all delinquents will be prosecuted for failing to comply with this order.

Notwithstanding every precaution being taken as a preventive measure, it seems to me that it is highly essential and almost criminal for the individual to fail to protect himself and his family from the invasion of the infected fly and mosquito by properly screening his house from these germ-laden intruders.

This screening at first chance would appear to be prohibitive on account of expense but if you will stop to consider the question you will realize that it is possible to screen an eight-room house for the sum of \$5.00, by simply purchasing two screen doors for the outside openings and place over the whole (not half) window mosquito netting. This as you see is a trivial expense and a small consideration when you realize that by so screening we may save ten times this amount in doctors' bills and twice as much in drug bills, not taking into consideration the anxiety caused by illness in the home and the possibility of a lifelong regret for failing to comply with this simple and inexpensive protection.

I would like to emphasize the fact that with Asheville's pure water supply, Asheville's pure milk supply, and Asheville's good sanitary closets and Asheville's good general sanitary condition, that by using the above method of screening to protect our people from an accidental infection, the careful people are absolutely free from danger.

The continued breeding of flies and mosquitoes with the attendant menace to the health of the life and comfort of man and beast, is the result of ignorance or worse—neglect.

### THE MOSQUITO

The mosquito's a busy little cuss,  
Always making such a fuss;  
He loads himself all up with germs,  
And then into your house he squirms.  
Just at the time you want to rest  
Is when he is the greatest pest,  
You make an effort to sleep, but find  
He cares nothing for your peace of mind.  
He gaily buzzes around the bed  
Finally alighting upon your head,  
You feel a pang, and hear a hum,  
His work is o'er, the worst's to come.  
Now comes the taking of many pills,  
And last but not least the doctor's bills;  
And while the doctor needs the pay,  
You'd better keep it for a rainy day.

### DO YOU LEGALLY EXIST?

The following item appeared not long ago in the daily papers:

"No Such Person; and So Can't Wed  
"By United Press Cable

"Paris, January 6.—You cannot be married because legally you do not exist, was the Lorient registrar's answer to Mlle. Kergue's application to wed. Her birth had not been recorded."

Do you legally exist?

Have you legal proof of your parentage? In other words, has your birth been recorded? This is a matter of rapidly-increasing importance in this country.

Failure to record the birth of children today will most surely result in much trouble for the man or woman tomorrow. Give your child legal evidence of its existence and of its parentage and save it future trouble and embarrassment, if not worse.



## Milk Test for Retail Dairies, June, 1914

	BACTERIA	*B. F.	†SP. GR.	°T. S.
Biltmore Certified.....	2,800	4.5	10.304	14.2
Biltmore.....	5,700	5.8	1.0304	14.8
White Pine (Pasteurized).....	12,500	4.2	1.0326	13.3
Violet.....	14,500	5.0	1.032	14.4
Oak Springs.....	16,000	4.8	1.0304	13.5
Fenner Farm.....	16,500	4.2	1.033	13.4
Oak Grove.....	38,000	4.4	1.034	14.
Mountain Range.....	20,000	4.2	1.030	12.7
Anandale.....	20,000	4.6	10.316	12.3
Sevier.....	25,000	4.8	1.034	14.6
Forest Hill Creamery.....	30,000	4.8	1.032	13.8
Dryman's Mountain.....	30,000	3.6	1.029	11.7
Middlebrook.....	30,000	5.	1.032	14.4
Laurel Springs.....	30,700	4.	1.0295	12.4
Wildwood.....	34,000	4.8	1.032	13.9
Edgewood.....	35,000	4.4	1.029	12.7
Sunset.....	36,000	4.6	1.0302	13.
Melrose.....	40,000	4.4	1.0318	13.2
Pleasant Hill.....	50,000	4.2	1.029	12.4
Swannanoa Dairy.....	68,000	5.0	1.0318	14.1
Locust Grove.....	72,500	5.2	1.0304	13.9

## Milk Test for Wholesale Dairies, June, 1914

	BACTERIA	B. F.	SP. GR.	T. S.
Emma Farm.....	16,500	4.	1.030	12.5
Scarborough.....	21,000	4.6	1.031	12.
Melvin Greenwood.....	22,500	3.8	1.029	13.2
C. Wilson.....	25,000	4.2	1.032	14.4
Stony Knob.....	30,000	4.8	1.033	12.
Nettles.....	34,000	3.8	1.029	14.2
McCall.....	35,000	5.	1.029	13.2
J. V. Baird.....	38,000	5.2	1.031	13.6
Swain.....	40,000	4.8	1.0305	12.5
Albert Reed.....	42,000	5.	1.029	13.2
M. Greenwood, New Bridge.....	43,000	5.	1.0295	13.5
W. L. Ray.....	45,000	4.2	1.0296	12.7
Hunsucker.....	45,000	4.2	1.029	12.5
Hill Farm.....	50,000	20% (Cream)		
H. L. Ray.....	50,000	4.	1.031	12.6
Sam Griffin.....	60,000	4.0	1.0705	13.6
Garrison Bros.....	62,000	4.2	1.0331	13.6
Calloway.....	70,000	4.8	1.031	12.7
O. Baird.....	90,000	4.0	1.031	12.7
Elmer Carter.....	100,000	4.2	1.030	12.7
Carter Bros.....	108,000	4.0	1.031	12.7
W. A. Baird.....	116,000	4.8	1.0312	13.7
Geter Greenwood.....	120,000	4.2	1.0295	12.5

All Dairy Herds are tuberculin tested annually.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep milk clean.

An average count of over 50,000 per unit would indicate careless methods.

\*Butter fat (legal minimum 3.25); †Specific gravity (legal minimum 1.029); °Total solids (legal minimum 11.75) indicate the chemical composition of the milk. Samples below standard would indicate adulteration.

# BULLETIN

OF THE  
HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 42

Entered as second-class matter, September 28, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

July 1914

"ASHEVILLE opens wide her doors to the sick and the well  
from every clime. but she demands that the sick shall so  
conport themselves that they shall not become a menace to the  
health of her citizens or the stranger within her gates."



"The structure of public health is builded upon a foundation  
that is largely fresh air and pure water."—Healthologist.



"Soap and water are the great civilizers of man."



"Is your bathing suit ready for the Swimming Pool?"



## Health Department City of Asheville

### BOARD OF HEALTH

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B. M. LEE, City Engineer.

C. W. BROWN, Chairman Finance Committee,  
B. of A.

W. R. PATTERSON, Chairman Sanitary Com-  
mittee, B. of A.

DR. C. V. REYNOLDS.

DR. E. B. GLENN

DR. W. L. DUNN.

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Phones: Residence, 174; Office 15.

W. H. BIRD, Sanitary Inspector, Phones: Resi-  
dence 374; Office, 152; Stable, 294.

L. M. MCCORMICK, Meat and Milk Inspector,  
Chemist and Bacteriologist, Phone 152.

ERNEST ISRAEL, Sewer and Plumbing Inspector.

W. FRANCIS, Water Superintendent.

**Population** { White - 15,000 } **20,000**  
                          { Colored - 5,000 }

### ASHEVILLE'S NEW ASSET

Asheville has many assets of which her citizens are justly proud, and chief among them stands her clear, tasteless, odorless water, in fact, all the ingredients of a pure water, no source of contamination, as is borne out by the fact that typhoid fever is a negative factor since its installation.

To realize that within the next few days her citizens, as well as her visitors, will have the privilege of swimming in such pure, uncontaminated water, is indeed a compliment to her progressive officials, and should be appreciated and popularized by the community at large.

As your Health Officer, it seems perfectly proper, on the eve of such a step forward, that considerable space be given to the subject of Public Swimming Pools.

#### THE HYGIENE OF SWIMMING POOLS

M. P. Ravenel, M.D., Director, State Hygienic Laboratory; Professor of Bacteriology; Chairman, Committee on Hy-

giene; University of Wisconsin, has the following to say:

The care of swimming pools in educational institutions and athletic clubs has of late years attracted considerable attention. Notable studies have been made, among which may be especially mentioned those at Brown University, and by Dr. William J. Lyster at the University of Pennsylvania. Gymnasias which are frequented by a large number of persons may act as foci of infection. It seems possible that a swimming pool with a limited supply of water when used by a large number of persons may serve to convey from one to the other pathogenic organisms. In this connection the danger from typhoid fever seems to attract the attention of many people. There is no doubt that contaminated water may produce this disease in swimmers as the water is not infrequently taken into the mouth.

The men's gymnasium at the University of Wisconsin is very much overcrowded and it was felt that a study of conditions here as found in both the men's and women's pools would be of unusual benefit. This was undertaken by the hygienic laboratory, and the work was done mainly by Mr. E. J. Tully, the chemist of the laboratory. Both chemical and bacteriological analyses were made. A study has been made of the increasing contamination of the pools between the changes of water, and also the value of the hypochlorite of lime in controlling the bacterial conditions. The methods followed in the analyses were those laid down by the committee on standard methods for water analysis of the American Public Health Association.

The swimming pool in the men's gymnasium is 80 feet long, 20 feet wide, and ranges from 4 to 10 feet in depth with a capacity of 97,000 gallons, approximately. The tank is emptied, cleaned and filled with water from Lake Mendota once each week. The lake water is warmed during the winter and maintained at a temperature of 70 degrees F. Approximately 275



men use the tank each day, until Saturday, when the number is very much increased. The bathers are required to take a shower bath before entering the pool.

The swimming pool in the women's gymnasium is 60 feet long, 20 feet wide and ranges from  $3\frac{1}{2}$  to 7 feet in depth, its capacity being approximately 70,000 gallons. Water from Lake Mendota is used in this tank also, but is filtered through coke and scrap iron before entering the pool. The pool is emptied each Friday, the tank allowed to air until Monday, when it is refilled, bathing beginning on Monday afternoon. The water is kept at a temperature of 75 to 80 degrees F. Only about fifty persons use the tank per day, and every person is required to take a shower bath before entering the pool. Lake Mendota is very rich in lower plant life and during the summer the water oftentimes acquires a very disagreeable smell on account of these vegetable growths. Formerly much sewage from the city of Madison and lake shore settlements emptied into the lake and several outbreaks of typhoid fever have occurred

which were attributed to the use of lake water. Of late years septic tanks and filter beds have been used and this condition has been very much approved. A large number of examinations were made, only some of which are presented here, but these are typical of all. Bacteriological and chemical analyses were made of the boys' tank in January, March and April, 1910, and in January and February, 1911; and samples collected in the girls' swimming pool during the same months of 1911. In 1911 and 1912 experiments with the hypochlorite of lime were carried out, as is shown by the table. Control samples were taken from the inflow pipe at the same time that the samples from the tank were taken.

The first series of examinations was done in January, 1910. Two samples were collected daily, morning and afternoon. The plating and inoculations of the fermentation tubes was done within fifteen to thirty minutes after the taking of the samples.

The following table gives the results of the first series of examinations from January 18 to January 29, 1910:

TABLE I

## BACTERIOLOGICAL EXAMINATIONS OF WATER FROM BOYS' SWIMMING POOL

			Gelatine	Agar	B. Coli			Chlorine
			Count per	Count per	Present in			
			c.c.	c.c.	1c.c.	1c.c.	10c.c.	in p.p.m.
Pipe sample	1-18-10	4 P.M.	150	5	—	—	+	1.4
Tank "	1-19-10	10 A.M.	455	439	—	—	+	1.4
" "	1-19-10	4 P.M.	5100	920	—	—	+	1.5
" "	1-20-10	10 A.M.	29600	3600	—	—	+	1.4
" "	1-20-10	4 P.M.	14800	1350	—	—	—	1.4
" "	1-21-10	10 A.M.	1400	440	—	—	+	1.6
" "	1-21-10	4 P.M.	540	440	—	—	+	1.8
" "	1-22-10	10 A.M.	620	220	—	—	+	2.1
" "	1-22-10	4 P.M.	1260	575	—	—	+	2.1
Pipe sample	1-24-10	4 P.M.	30	18	—	—	+	1.1
Tank "	1-25-10	10 A.M.	163	420	—	—	+	1.1
" "	1-26-10	10 A.M.	1470	500	—	—	+	1.1
" "	1-26-10	4 P.M.	21970	660	—	—	+	1.2
" "	1-27-10	10 A.M.	16900	1550	—	—	+	1.2
" "	1-27-10	4 P.M.	9700	—	—	+	+	1.2
" "	1-28-10	10 A.M.	1280	240	—	+	—	1.2
" "	1-28-10	4 P.M.	380	270	—	—	+	1.3
" "	1-29-10	10 A.M.	590	128	—	—	—	1.8
" "	1-29-10	4 P.M.	1560	405	—	+	+	2.0

The results show that the number of bacteria gradually increases, the maximum being reached about the middle of the week, followed by a decrease until Saturday, when a considerable increase is again apparent. This is probably due to the large number of bathers using the tank on Saturday. The colon bacillus is usually present in ten cubic centimeters, and sometimes in one cubic centimeter of lake water. During the two weeks of this examination colon was generally present in ten cubic centimeters and only occasionally in one cubic centimeter of the tank water. The increase in the chlorine content was slight. In all the examinations the chlorine content showed very slight increase.

Experiments were carried out in the laboratory on the action of hypochlorite

of lime in purifying the water in the swimming tank. The first step necessary was the determination of that amount of available chlorine per million which would produce practically sterile water. Samples of water from the boys' swimming pool containing 250 cubic centimeters each, were treated with hypochlorite of lime in the proportion of .5 of 1 part, and 1 part of available chlorine per million for thirty minutes. The bacterial content of the samples was materially reduced and the colon bacillus generally destroyed with the use of .5 of 1 part of available chlorine. When 1 part of available chlorine per million was used the water became practically sterile and all traces of the colon bacillus disappeared. The results are shown in Table No. 6.

TABLE VI

BACTERIOLOGICAL EXAMINATION OF WATER FROM BOYS' SWIMMING POOL, SHOWING REDUCTION OF BACTERIA CAUSED BY THE ADDITION OF BLEACHING POWDER

			Count on Gelatine per c.c.	Count on Agar per c.c.	Gas in Dextrose Broth		B. Coli Present in	
					1c.c.	10c.c.	1c.c.	10c.c.
Pipe sample	2-28-10	11.00 A.M.	275	16	+	+	+	+
Tank "	3-29-10	11.00 A.M.	445	480	+	+	+	+
" "	3-29-10	3.30 P.M.	920	483	+	+	+	+
" "	3-30-10	11.00 A.M.	5630	680	+	+	+	+
" "	3-30-10	3.30 P.M.	19100	1140	+	+	+	+
" "	3-31-10	11.00 A.M.	24000	1190	—	+	—	+
" "	3-31-10	3.30 P.M.	10000	1080	—	+	—	+
" "	4- 1-10	11.00 A.M.	1700	696	—	+	—	+
" "	4- 1-10	3.30 P.M.	2570	780	—	+	—	+
" "	4- 2-10	10.30 A.M.	2800	560	+	+	+	+

SAME SAMPLES TREATED WITH .5 PART AND 1 PART AVAILABLE CHLORINE  
RESPECTIVELY FOR 30 MINUTES

			Count on Gelatine		Count on Agar		B. Coli Present in			
			per c.c.		per c.c.		1c.c.	10c.c.	1c.c.	10c.c.
			.5 Part av.cl.	1 Part av.cl.	.5 Part av.cl.	1 Part av.cl.	.5 Part av.	1 Part cl.	.5 Part av.	1 Part cl.
Pipe sample	3-28-10		0	0	1	0	—	—	—	—
Tank "	3-29-10		4	0	5	0	—	—	—	—
" "	3-29-10		8	0	8	0	—	+	—	—
" "	3-30-10		4	0	2	2	—	—	—	—
" "	3-30-10		30	0	45	1	—	—	—	—
" "	3-31-10		130	5	120	1	—	—	—	—
" "	3-31-10		14	0	27	1	—	—	—	—
" "	4- 1-10		15	0	9	0	—	+	—	—
" "	4- 1-10		12	0	30	1	—	—	—	—
" "	4- 2-10		27	0	66	0	—	+	—	—

## CONCLUSION

It must be admitted that contagious diseases can be spread by means of artificial swimming pools, and that if the water contains the germs of typhoid fever, they can be taken into the system. With ordinary waters and with a pool of good capacity, the change once a week keeps the water in fairly good condition. The addition of hypochlorite of lime is a simple, cheap and safe procedure which insures absolute safety.

## ONLY ONE OBSTACLE

In a modern pool, with a scum overflow, filled with Asheville's pure water, with the use of hypochloride of lime, there remains but one obstacle, which is: outside contamination, individual contamination.

## THE SWIMMING POOL A FACTOR IN PUBLIC HEALTH

The pool is indeed a step forward in public health and recreation, and many pleasures can be had in developing its wholesome exercise and at the same time stimulating its popularity by innocent competition in water sports.

Some like to bathe for the sake of becoming clean, others have an antipathy to it, but all like pleasure and recreation, and through pleasure and recreation some may be led to realize that bathing is not so bad after all.

The swimming pool is a means of promoting habits of personal cleanliness and comfort, and if properly equipped and maintained is surely a great health measure.

There are many sources of danger, and all safeguards should be looked into, and every prevention taken, thereby protecting the public against infection, rather than attempting to relieve after the contamination has had its deleterious effects.

## REQUIREMENTS

- 1st. Every swimmer should be inspected as to skin diseases.
- 2nd. All swimmers should take a

soaping and followed by a shower bath before entering the pool.

3rd. All bathing suits should be left with the manager for steam cleaning before being used the second time.

## TENTATIVE REGULATIONS

In assembling the regulations that will govern at the Aston Park Swimming Pool after approval by the Board of Aldermen, the Parks Committee is endeavoring to provide rules without the frills that might interfere with the true enjoyment of swimming, and at the same time to surround the swimmers with wholesome health conditions and to demonstrate the worth of this splendid sport, its merits as a life-saver in time of peril, and the superior qualities of Asheville air and Asheville water.

The use of the shower by the bathers before entering the pool should be compulsory for two reasons: first, to cleanse the body from the impurities of condensed perspiration; and second, as a "stop, look and listen" sign to an overheated person before he enters the pool.

Individual ownership of bathing suits will prevent the possible contamination that might ensue from indiscriminate use of these articles, and such requirements would obviate the necessity of providing suits and making a charge therefor.

Capable attendants should be able to observe apparent health deficiencies, and if occasion required it, the applicant must obtain a physician's certificate before he can enter the pool.

The bath houses will be thoroughly cleansed daily. The interior construction of the women's bath house will consist of a series of individual rooms 4x6 feet, with latticed doors; there will be toilet conveniences and showers. The men's bath house will be fitted with lockers in tiers, toilets and showers.

The inflow pipes of the pool are of simple but ingenious construction; the water is conveyed to the bottom of the



pool by a three-inch pipe where it is connected with a smaller pipe layed longitudinally the length of the pool; this latter pipe is perforated at intervals with openings one-eighth inch in diameter, and the force of the supply is exerted in a constant agitation of the water throughout the pool.

The pool is surrounded by a cement walk five feet wide with a gutter depression at the outer edge; the water level of the pool will be three inches below the level of the walks, and water splashed by the bathers over the edge of the pool, either in their sport or when emerging therefrom in passing to the bath houses, will run in the low point of the gutters to the emptying drain.

The pool is 100 ft. long and 30 ft. wide with a sloping bottom and will be, when full, from  $4\frac{1}{2}$  to 9 ft. deep.

### ASHEVILLE CITIZENS FREE FROM TYPHOID FEVER—WHY?

1. Because we have pure water.
2. Because our dairies have pure water.
3. Because all available closets are connected or are being connected with the sewer.
4. Because all unavailable to sewer and water have sanitary closets.
5. Because the fly campaign is on continuously.
6. Because we often examine the milk sold.

How is this done?

1. By careful and painstaking laboratory analysis.
2. By frequent visits and tabulated reports of the sanitary conditions of the city and dairy barns and surroundings, supplying milk into Asheville.

Another source of danger.

What? Typhoid carriers!

Shall we lead the world again?

How?

By requiring all those who handle milk to become immunized against typhoid fever.

Just a word:

Throughout the world where the United States has maintained her army and navy, she has required her soldiers to be vaccinated against typhoid fever. Thousands have been so immunized, and not one doubtful case of typhoid fever has occurred, while previous to its use the death rate was large and many, though recovering, suffered through long and serious illness.

### SUMMARY

Typhoid vaccination produces the greatest immunity since 1743.

It is positive protection.

It is not dangerous.

It is painless.

It does not cause you to lose any time from your work.

It is foolish not to protect yourself now.

If not yourself, you must protect your neighbor against you.

### A HINT TO THE WISE

All those spending week-ends out of the city and drinking unknown water, should be vaccinated against typhoid fever.

Remember that it is a sure protection, and that you suffer no inconvenience by becoming vaccinated.

### Human Nature

MIKE—"If all the flies in the world were put in a big wooden box and set afoire, wouldn't it be a foine sight to see it blaze?"

PAT—"Faith, and wouldn't some bloomin' idiot call out the foire depoirtment?"

MRS. BOARDINGHOUSE—"Grocer, how do you pronounce butterine?"

GROCER—"The last syllable is silent, ma'm."

## STANDING OF ASHEVILLE RESTAURANTS AS SCORED BY U.S. STANDARDS

	EQUIPMENT	METHODS	FINAL SCORE
Candy Kitchen.....	97½	97	97
Langren Grill.....	97½	95	96
Pisgah Cafe.....	94	83	86½
Yuneda Dairy Lunch.....	91	85	85
Crystal Cafetarian.....	93	80½	84½
Rea Cafe.....	90½	81	84
Gladstone.....	94½	77	82½
Sterling Cafe.....	94½	77	82½
Railroad Restaurant.....	98½	79	82
New York Lunch.....	76	80½	79
United States.....	82	74	76½
Crystal Dairy Lunch.....	79½	78	76½
Baltimore Cafe.....	83½	69½	74
Busy Bee.....	79½	69	72½
Central Cafe.....	72	70½	71
Eureka Lunch Room.....	68½	70½	69½
Dixie Cafe.....	69	69	69
California Lunch Room.....	77	61	66½
Y.M.I. Restaurant (colored).....	63	61	61½
Crescent (colored).....	55	43	47
Pearson Quick Lunch (colored).....	47½	40	42

### POINTS ALLOWED BY GOVERNMENT SCORE CARD—IN DETAIL

**EQUIPMENT**—CONSTRUCTION 10—Floors and Drainage 7, Walls 2, Ceilings 1.

ARRANGEMENT 7—Proper Rooms 4, Convenience 3, Light 5, Ventilation 5,  
Screens 5, Cellar 3.

PLUMBING 20—Kind, quality, location and condition—Water Closets 10, Sinks 10.

EQUIPMENT 25—Kind, quality, arrangement—Ice Boxes 15, Tables 5, Utensils 5.

WATER FOR CLEANING 20—Hot 15, Cold 5—Total 100.

**METHODS**—CLEANLINESS 20—Floors 5, Walls 3, Ceilings 1, Doors 1, Windows 1,  
Good Order 1, Free from Odor 2, Freedom from Flies 6.

EQUIPMENT (CLEANLINESS) 30—Ice Boxes 10, Tables 5, Sinks 5, Utensils 10,  
Employees' Cleanliness 5.

FOODS 30—Conditions 10, Storage 10, Handling 5, Cleanliness 5.

GARBAGE RECEPTACLES 15—Adequate 5, Location 5, Condition 5—Total 100.

## MILK TEST FOR RETAIL DAIRIES, JUNE 1914

	BACTERIA	*B.F.	†SP.GR.	°T.S.
Biltmore, Certified.....	3,000	5.	1.034	13.9
Biltmore.....	7,000	5.4	1.032	14.6
White Pine (Pasteurized).....	7,225	5.	1.032	14.2
Fenner Farm.....	12,000	4.	1.0305	12.5
Violet.....	15,000	5.	1.032	14.2
Oak Grove.....	16,000	5.	1.031	13.9
Middlebrook.....	18,000	5.	1.030	13.7
Oak Springs.....	19,000	5.	1.032	14.2
Melrose.....	22,000	4.4	1.0295	12.6
Laurel Springs.....	25,000	4.	1.0305	12.6
Sevier.....	25,000	5.2	1.0295	13.7
Sunset.....	35,000	4.4	1.032	13.4
Anandale.....	35,000	4.8	1.0295	13.4
Edgewood.....	40,000	4.2	1.029	12.5
Pleasant Hill.....	50,000	4.1	1.0275	11.8
Forest Hill.....	70,000	4.6	1.029	12.8
Wildwood.....	70,000	5.2	1.034	14.8
Mountain Range.....	70,000	4.2	1.032	13.5
Locust Grove.....	75,000	4.6	1.0301	13.3
Dryman Mountain.....	130,000	4.2	1.0315	13.1

## MILK TEST FOR WHOLESALE DAIRIES, JUNE, 1914

	BACTERIA	*B.F.	†SP.GR.	°T.S.
McCall.....	15,000	4.2	1.032	13.4
Nettles.....	28,000	5.	1.030	13.7
Scarborough.....	33,000	5.2	1.031	14.2
I. V. Baird.....	37,000	4.	1.0295	12.3
Carter Bros.....	48,000	4.2	1.0315	13.2
Emma Farm.....	75,000	5.	1.029	13.4
Hill Farm.....	75,000	16% Cream		
Melvin Greenwood.....	83,000	3.6	1.029	11.7
Swain.....	87,000	5.4	1.033	14.8
Charles Wilson.....	87,000	4.6	1.031	13.4
W. L. Ray.....	100,000	4.2	1.029	12.5
Stony Knob.....	100,000	4.4	1.032	13.4
Albert Reed.....	100,000	6.	1.029	14.6
Swannanoa.....	100,000	5.	1.0295	14.6
Elmer Carter.....	123,000	5.	1.031	13.8
Sam Griffin.....	123,000	4.6	1.0317	13.6
Garrison Bros.....	125,000	5.4	1.032	14.7
Calloway.....	133,000	4.	1.0295	12.2
Melvin Greenwood.....	150,000	3.8	1.027	11.5
W. A. Baird.....	166,000	4.	1.0305	12.5
H. L. Ray.....	175,000	3.8	1.029	12.
Jeter Greenwood.....	200,000	4.2	1.0295	12.5
Hunsucker.....	200,000	4.6	1.030	13.2
J. O. Baird.....	295,000	5.6	1.037	15.

All Dairy Herds are tuberculin tested annually.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep milk clean.

An average count of over 50,000 per unit would indicate careless methods.

\*Butter fat (legal minimum 3.25); †Specific gravity (legal minimum 1.029); °Total solids (legal minimum 11.75) indicate the chemical composition of the milk. Samples below standard would indicate adulteration.



# BULLETIN

OF THE  
HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 43

Entered as second-class matter, September 23, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

Aug. 1914



The Mountain Girl City, the queen of "The Land of the Sky," where there is found an unexcelled climate; pure water; certified milk; tubercular tested cows; closely inspected dairies; pure food laws; abattoir, meat and restaurant inspection; flushed streets; swimming pool, alive with many attractions for the seeker of health and pleasure.

Proud of her national reputation of taking the initiative in public sanitation, she bids you welcome.

## Health Department City of Asheville

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Phones: Residence, 174; Office 15.

W. H. BIRD, Sanitary Inspector, Phones: Resi-  
dence, 374; Office, 152; Stable, 294.

L. M. McCORMICK, Meat and Milk Inspector,  
Chemist and Bacteriologist, Phone 152.

ERNEST ISRAEL, Sewer and Plumbing Inspector.  
W. FRANCIS, Water Superintendent.

**Population** { White - 15,000 } **20,000**  
                  { Colored - 5,000 }

### WHAT ARE BACTERIA ?

They are very small, infinitesimally small plants, and do not think for one moment that you can see them, for it is quite difficult to form even an idea of their size.

To give you some conception of their size it will be necessary to think of them collectively; 25,000 rod-shaped bacteria placed end to end would equal about one inch, and then so light that it would take 16,800,000,000,000 to weigh one ounce.

For food they are dependent upon organized plants or animals to prepare it for them, hence "we find them where there is animal or plant tissue" one form on living tissue,—the parasites—the other saprophytes which receive their nourishment from decayed plant or animal matter.

While in conversation with a patient in

regard to his having a disease caused by these bacteria, he said: "Of course I have it; don't I see the little red things?" It made me laugh; it was so ridiculous. I asked him how large was that window which happened to be in front of him, he said: "About three feet square." I remarked: "That is correct, but judging from your being able to see bacteria, that window should look to you 1,200 times larger, 4 acres, for it takes a microscope with a lense that magnifies 1,200 times for me to see them and that window looks just about as large to me as it does to you." "Well," he said, "I must have been mistaken."

They are little things, but my! what trouble-makers are they when some of them get into the milk.

What they lack in size they make up in number and power of reproduction. A cubic centimeter (about 25 drops) of milk from a careless dairyman's bottle often contains 200,000 bacteria—how would you like to drink a pint? Would you mind looking in the Bulletin and find how your dairyman's count is? If good, praise him; if bad, ask him what is the matter, and if it continues to be bad, condemn him.

The growth of bacteria is dependent upon many things. Temperature is quite important; almost all will not multiply if the temperature is below 40 degrees or above 150 degrees, but between 68 and 100 degrees with milk at this medium they multiply by the thousands in a few hours.

This information is not guess work, neither is it imaginary, but gathered from exact counts, which we will gladly show you if you care to call at the laboratory.

Now if this be true,—and it is true—(ask the careful dairyman), why not cool the milk promptly and keep it cool until it reaches the consumer? and just here, it would be well to add that the consumer should realize that the bacteria will grow for him or her just as it does for the dairyman, so don't forget that you, the restaurant, hotel or boarding-house keeper, or the individual, have a grave responsibility in this fight against disease from this source, and that there is nothing gained if you do not do your part.

There are many other sources from which bacteria may gain entrance. First you must have a healthy cow, carefully cleansed for milking as well as a clean, dustless, well ventilated barn; a healthy, clean milker, with his or her strainer cloths having been well boiled; sanitary milk pails and milk cans, thoroughly cleaned with boiling water or steamed for 15 minutes and screened from flies, etc. The neglect of any of these essentials will destroy the effect of all other care and your labor lost. But remember it takes but little more time to do the work properly and if done properly the number of bacteria may be kept down to a few thousand to the cubic centimeter, and if careless methods are used 100,000 will be reached and the consumer will be the victim of disease and the dealer will be the victim of embarrassment as well as placing the Health Department in the position of having to deprive him of Asheville as a market.

Sour milk is sold at a loss—remember bacteria—lactic acid bacteria are always present and the object is to lessen their development. How? They multiply rapidly in warm milk and cause it to sour.

Cool quickly and your milk will not sour quickly.

### STANDARDS FOR MILK

[From American Medical Journal,  
Aug. 8th, 1914]

The first report of the Commission on Milk Standards, appointed by the New York Milk Committee, was published in the United States Public Health Reports, May 10, 1912. The second report of the commission was published in the same place, Aug. 22, 1913. At the annual meeting of the commission, held in New York in May of the present year, the commission decided not to make any changes in the classification of the report of the commission as contained in its last published report, but recommended that efforts be made by the New York Milk Committee looking toward the adoption of a classification and standards for milk by state, local and municipal health authorities.

At the recent session of the American Medical Association, the Section on Preventive Medicine and Public Health adopted a resolution endorsing the standards suggested by the commission. This resolution was referred to the House of Delegates, and, after having been considered by the Reference Committee on Hygiene and Public Health, was approved by the House.

Just previous to the meeting of the American Medical Association, the Conference of State and Provincial Boards of Health of North America unanimously adopted a resolution endorsing the standards and classification of milk along the lines suggested in the report of the commission, and urged the establishment of



such uniform milk standards and classification by state, municipal and local health authorities.

It is believed that the adoption of these resolutions, emphasizing as they do the interest for the establishment of milk standards and the classification of milk, will be of material aid in forwarding the campaign for pure milk now being waged throughout almost the entire country.

It is understood that the New York Milk Committee has under contemplation, in accordance with the suggestion of the Commission on Milk Standards, the inauguration of a campaign throughout the United States looking toward the adoption of uniform milk standards and classifications.

There are at present pending before the courts, in various sections of the country, cases against milk-dealers for selling milk containing large numbers of bacteria. One of the points that has been raised by the defense has been that the standards proposed by the Commission on Milk Standards have not been endorsed by representative bodies. The fact that the report of the commission has received the endorsement of the American Medical Association, the Conference on State and Provincial Boards of Health, the American Public Health Association and the American Veterinary Association absolutely demolishes this argument.

There is probably no single factor proposed for the control of milk-supplies that is of greater assistance to the authorities in forcing dealers to sell a safe and pure milk than is the adoption and enforcement of bacterial standards for milk. One of the arguments that has been raised by opponents of bacterial standards for milk

has been that it is not the number of bacteria, but the kind of bacteria that is of harm, and the statement is made that a few typhoid bacilli are of infinitely more harm than millions of lactic acid organisms. These statements are, of course, true; but the number of bacteria in a milk undoubtedly gives valuable information as to the conditions under which that milk was produced, how it has been handled and how it was kept as regards refrigeration.

The adoption by public health authorities of standards such as those proposed by the Milk Commission and endorsed by the American Medical Association, modified to suit local conditions, will be a potent factor in advancing the cause of pure milk in the United States.

NOTE—The Asheville Health Department has used these standards as nearly as local conditions permit since their publication in 1912.

Report of the N. Y. Milk Commission endorsed by the Am. Med. Association.

#### PREAMBLE—NEED OF MILK CONTROL

Proper milk standards, while they are essential to efficient milk control by public health authorities and have as their object the protection of the milk consumer, are also necessary for the ultimate well-being of the milk industry itself. Public confidence is an asset of the highest value in the milk business. The milk producer is interested in proper standards of milk, since these contribute to the control of bovine tuberculosis and other cattle diseases and distinguish between the good producer and the bad producer. The milk dealer is immediately classified

by milk standards, either into a seller of first-class milk or a seller of second-class milk, and such distinction gives to the seller of first-class milk the commercial rewards which he deserves, while it inflicts just penalties on the seller of second-class milk. For milk consumers, the setting of definite standards accompanied by proper labeling makes it possible to know the character of the milk which is purchased and to distinguish good milk from bad milk. In the matter of public health administration, standards are absolutely necessary to furnish definitions around which the rules and regulations of city health departments can be drawn and the milk supply efficiently controlled.

While public health authorities must necessarily see that the source of supply and the chemical composition should correspond with established definitions of milk as a food, their most important duty is to prevent the transmission of disease through milk. This means the control of infantile diarrhea, typhoid fever, tuberculosis, diphtheria, scarlet fever, septic throat infections, and other infectious diseases in so far as they are carried by milk.

The Commission fully considered the matter of the publication of laboratory examinations of milk by city and town health authorities. When proper standards and regulations are established and adequate facilities furnished for laboratory work, it is believed that the laboratory tests will give an index of the character of the milk delivered to the public by milk sellers which is entirely fair and impartial. There can be no objection to publicity under such circumstances. It is an advantage to the seller of high grade

milk. It has much educational value both to producer and consumer. Therefore the commission recommends "that the reports of laboratory analyses of milk made by departments of health be regularly published."

Milk should be graded and classified. The classification should be the same for both large and small cities and towns. Milk should be graded into four classes, as follows:

Class A—Certified milk or its equivalent.

Class B—Inspected milk.

Class C—Pasteurized milk.

Class D—Milk not suitable for drinking purposes.

Cream should be classified into the same grades as milk, in accordance with the requirements for the grades of milk, with special bacterial standards which should not exceed 30,000 per cubic centimeter in the case of grade A, and 300,000 per cubic centimeter in the case of grade B.

Class A milk shall contain less than 10,000 bacteria per cubic centimeter.

Class B milk shall contain less than 100,000 bacteria per cubic centimeter.

On the subject of laboratory examinations of milk for bacteria, the Commission passed the following resolutions:

That the interests of public health demand that the control of milk supplies shall include regular laboratory examinations of milk by bacteriological methods.

That among present available routine laboratory methods for determining the sanitary quality of milk the bacteria count occupies first place.

#### CREAM—REQUIREMENTS AND RECOMMENDATIONS

It shall be obtained from milk that is

produced and handled in accordance with the provisions hereinbefore set forth for the production and handling of milk.

#### STANDARDS FOR MILK—REQUIREMENTS

It shall not contain more than 100,000 bacteria per cubic centimeter.

It shall contain not less than 3.25 per cent milk fat.

It shall contain not less than 8.5 per cent solids not fat.

#### RECOMMENDATIONS

The bacterial limit shall be lowered if possible.

#### STANDARDS FOR CREAM—REQUIREMENTS

It shall not contain more than 300,000 bacteria per cubic centimeter.

It shall contain not less than 18 per cent milk fat.

### THE MILK CONSUMER

In our efforts to improve conditions of milk supply and educate the producer, the consumer is often neglected. This is unfortunate since the consumer is almost always ignorant of the proper way to handle milk after he has received it. From the April issue of the Portland Health Bulletin, come the following "Don'ts" for consumers:

"Don't take milk from your dairyman unless it is in bottles."

"Don't leave milk where it will be exposed to warmth. Remove it to a cool place, all entirely away from vegetables."

Don't remove the cap from the bottle nor pour the milk out without wiping off the top of the bottle."

"Don't replace the cap on the bottle of milk after it is once removed; place a clean glass of cup over the neck."

"Don't pour milk back in the bottle from pitcher; take out only enough for the meal."

"Don't neglect to ring up the Milk Department at the City Hall to find out about your milk supply."

### WHAT IS PASTEURIZED MILK ?

Pasteurization as applied to milk consists in heating it for a short period of time at a temperature below the boiling point, followed by rapid chilling.

The two dominant factors that control the temperature are (1) the thermal death points of pathogenic bacteria, and (2) the point at which chemical changes appear in the general constituents of milk.

"Boiled" milk has a cooked taste and the separation of cream afterward is prevented, but the dangerous bacteria die if the milk is held at 140 degrees for twenty minutes and at this temperature, the taste and quality of milk is not unfavorably changed.

Pasteurization is gaining ground among the investigators who are endeavoring to obtain a satisfactory milk supply for the cities of this country. In Europe the habit of boiling milk before using is quite as generally established as that of cooking meats, but in this country there has been more or less of prejudice against the using of cooked milk, especially for infant feeding.

Recently, experiments by Dr. Schroeder of the Bureau of Animal Industry, on several hundred guinea pigs, taken from their mothers at birth and fed on raw milk, pasteurized milk and boiled milk, seemed to be convincing in the conclusion that heated milk is in itself just as nourishing and digestible as raw milk, with the



added advantage that the disease producing bacteria are also destroyed.

While a number of investigators still admit that milk in its natural state, if really fresh and clean cannot be improved by heating, still the element of risk of contamination in producing milk under ordinary circumstances is reckoned as so large that in several large cities all milk not certified, or its equivalent, is required to be pasteurized.

In Asheville, one milk distributing company, the White Pine Creamery, is furnishing pasteurized milk to its customers, and while no element of vigilance by the Health Department is relaxed in favor of the milk man supplying the Creamery, we are glad to have an extra precaution taken by this enterprising firm.

### ON WASHING THE HANDS

"Food, fingers and flies" has been in the past an excellent watchword of sanitarians. Today all research and all practice has been subdivided and it is worth while now to pay attention to individual factors that are here classed together. A modern watchword should, "Wash the hands."

It is true that we do wash our hands some, but it is a practice that should be extended. The fingers touching everything and playing continually about the mouth convey to the lips whatever they may have collected. In the universal interchange of saliva, it is through the fingers very largely that the exchange is made. If the hands were washed frequently much of the exchange would be lost. And further, if the present idea concerning typhoid fever is to be ac-

cepted, its spread would be largely curtailed if people would wash their hands.

There is here a lesson that may be learned from the Hebrews. Following all bodily offices there is a little religious ceremony involving the washing of the hands, and this with other ablutions must count for much in the way of prevention.

One practice which seems worthy of place in the cleanliness of people is the washing of the hands after touching the shoes. The latter come into contact with whatever there may be of filth or infection of the pavement. This may be street, sidewalk, railway track or elsewhere. Washing the hands frequently is a sensible protective measure. In fact those hospitals where the same nurse looks after different contagious diseases it is the chief reliance in preventing cross infection.

### LEST YOU FORGET

All the time is clean-up time. Keep a-scrubbin'!

\* \* \*

Dirt accumulates rapidly and must be fought steadily if you wish to be clean.

\* \* \*

A once-a-year clean-up is on a par with a once-a-year bath.

\* \* \*

An habitually dirty citizen is dirty from choice, not from necessity. A will to be clean will find a way.

\* \* \*

Cleanliness is a civic, social and health requirement. It is tremendously important—it is imperative.

\* \* \*

You can be clean—you **MUST** be clean.

Pay heed, or you will pay dearly for your heedlessness.

### ARE YOU TAKING CARE OF YOUR GARBAGE PAIL ?

Any self-respecting pail would like you to do this for it:

Place clean newspapers in it every day.

Sprinkle daily with chloride of lime.

Drain all refuse carefully.

Scald with boiling water and washing soda suds weekly or oftener.

Air sometime every day.

Empty it into a covered retainer, which, in turn, is being cared for and emptied daily by the ashman, the garbage man or someone whose special duty it is.

—New York Sun.

### ICE CREAM STANDARDS

The Minnesota Dairy and Food Commissioner is putting out literature the purpose of which is to educate the Minnesota people to the necessity of having ice cream standards. He points out the condition of the ice cream trade in that state 8 or 10 years ago, before any attempt had been made to bring ice cream under official control.

In January, 1907, the manufacturers of ice cream were called together and after a rather lengthy discussion it was agreed by all that 12% was a proper legal standard. Laws were then drawn and on April 6, 1907, the present law became effective.

The question is being agitated at the present time doubtless because in some other states there has been a decided fight made on ice cream standards. In one or two instances the courts have declared the law under which standards were made as unconstitutional. The

manufacturers are united in their determination to break every barrier that will keep them from selling any kind of frozen product regardless of its fat content as ice cream. The Minnesota Food and Dairy Department will probably have to meet the issue and they are getting ready for it.

### HEALTH WORK PAYS BIG DIVIDENDS

The preliminary report of the state department of health on the vital statistics for last year is just being made and Asheville as usual is highly complimented.

The report says in part:

The figures for last year cover only the deaths in towns having a population of 1,000 or more. This really means only about one-sixth of the population of the state. Beginning with this year with the new vital statistics low figures will be available for the entire state not only for deaths, but also for births.

From the figures completed yesterday, it was found that there was a total of 245 deaths from typhoid fever in the towns of the state having a population of over 1,000. This would mean approximately 1,470 for the entire state as against approximately 972 for 1912 and 1,590 for 1911. Based on the 1913 figures alone it gives us a typhoid death rate of 64.0 per 100,000, or based on the average for the last three years it gives us a death rate of 9.2 per 100,000 as against the average typhoid death rate of 21.0 per 100,000 in the United States.

This, in the opinion of the board, is a tremendous death rate from this preventable filth disease, and a disgraceful state of affairs. The typhoid fever death

rate is generally recognized as the index of the sanitary conditions of a community. It indicates in unmistakable "hand-writing on the wall" that we will have to abolish old open-backed privies and make sewer connections in towns and use sanitary privies or fly tight privies built over pits or holes in the ground, instead of allowing flies and domestic animals to carry and scatter this germ laden typhoid material far and wide.

Now that typhoid vaccine may be obtained free of charge from the state board of health through any physician in the state, there is absolutely no reason why any one who values his life or health at all should not protect himself absolutely against typhoid, even though his neighbor does breed flies and keep an open-backed privy.

"Seven towns in the state had a typhoid death rate of over 100 to 100,000. These in their order are, Sanford, first, with 186.3; Louisburg, second, 152.5; Hendersonville, third, 129.0; High Point, fourth, 124.1; Burlington, fifth, 115.8; Forest City, sixth, 114.1; and Winston-Salem, seventh, 104.0. With typhoid death rates over five times as high as the average in the United States, there is no question but that these towns need to do some house cleaning and establish a health department.

"Of the seven largest cities in the state, as might be expected, ASHEVILLE with her excellent health department has the lowest death rate of 25.3, or just one half that of Greensboro, the next lowest with 50.6. The next in order after Greensboro are Durham 59.7; Charlotte 66.7; Raleigh 71.0; Wilmington 76.8; Winston-Salem

104.0. HEALTH WORK PAYS BIG DIVIDENDS IN HUMAN LIFE AND HEALTH."

The State Board of Health in computing the above statistics, charges Asheville with deaths occurring in our local hospital, irrespective of where the disease was contracted.

As a matter of fact, of the five deaths from typhoid fever in 1913, one was brought to the Mission Hospital for treatment from Madison County; one came for treatment from Old Fort and died in the Mission Hospital; one was ill on arrival from Charleston, S. C., and one died of relapse after arriving at the Battery Park Hotel from Detroit, Mich. This leaves but one death from typhoid fever among the residents of Asheville in 1913, which would give a death rate per 100,000 of 5.2 instead of 26.3.

### RESTAURANT AND LUNCH ROOM INSPECTION

In last month's list an error of addition reduced the score of the Crystal Dairy Lunch two points, which would have made it eleventh instead of twelfth on the list. This error escaped the notice of the Inspector who is responsible for the publication.

In using the score card system to get the standing of restaurants and lunch rooms, the different factors which affect the conditions are judged separately and deficiencies marked down, so as to call the attention of those in authority to the items where in the judgment of the inspector, improvements are needed.

Under equipment, are classed permanent construction and conditions which it may not be practical to change; and under methods are put those points well



within the control of the management. In order to give more credit to the manager this part is multiplied by two, added to the equipment score and the total divided by three for the final score.

The present list has been carefully checked over and it is hoped that such errors have been corrected. In work of this kind, where comparative conditions must play a part, it has been considered better that one inspector do all the scor-

ing in order to secure uniformity, and this Department has full confidence in the faithfulness, honesty and discretion of the inspector assigned to this work. As some comment was aroused by the publication of the score, another inspector has reviewed the work and his report indicates that the errors in judgment, if any, of the first inspection, were in favor of the restaurants, rather than of the customers and public who are entitled to know.

### STANDING OF ASHEVILLE RESTAURANTS AS SCORED BY U.S. STANDARDS

	EQUIPMENT	METHODS	FINAL SCORE
Candy Kitchen.....	97 1/2	97	97 4/25
Langren Grill.....	99	94	95 2/3
Railroad Restaurant.....	91	93	92 1/2
Woman's Exchange.....	93	87 1/2	89 1/3
Pisgah Cafe.....	94	83	86 2/3
Gladstone Hotel.....	91	83 1/2	86
Yuneda Dairy Lunch.....	86 2/3	83 1/2	84 5/9
Crystal Cafetarian.....	90 2/3	81 1/2	84 5/9
New York Lunch.....	83	84	83 2/3
Rea Cafe.....	87	81	83
Baltimore Cafe.....	86	78 1/2	81
Southern Restaurant.....	80	81	80 2/3
Eureka.....	80	80	80
Central Cafe.....	77	80	79
Crystal Dairy Lunch.....	80 1/6	77 1/4	78 2/3
California Lunch Room.....	79	76 1/2	77 1/3
Busibee.....	84	73	76 2/3
United States Cafe.....	80	74 1/2	76 1/3
Dixie Cafe.....	69	63 1/2	65 1/3
Y.M.I. Restaurant (colored).....	56	60 1/2	59
Crescent (colored).....	58	50 1/2	53
Pearson Quick Lunch (colored).....	46	47 1/2	47

#### POINTS ALLOWED BY GOVERNMENT SCORE CARD—IN DETAIL

**EQUIPMENT**—CONSTRUCTION 10—Floors and Drainage 7, Walls 2, Ceilings 1.

ARRANGEMENT 7—Proper Rooms 4, Convenience 3, Light 5, Ventilation 5, Screens 5, Cellar 3.

PLUMBING 20—Kind, quality, location and condition—Water Closets 10, Sinks 10.

EQUIPMENT 25—Kind, quality, arrangement—Ice Boxes 15, Tables 5, Utensils 5.

WATER FOR CLEANING 20—Hot 15, Cold 5—Total 100.

**METHODS**—CLEANLINESS 20—Floors 5, Walls 3, Ceilings 1, Doors 1, Windows 1, Good Order 1, Free from Odor 2, Freedom from Flies 6.

EQUIPMENT (CLEANLINESS) 30—Ice Boxes 10, Tables 5, Sinks 5, Utensils 10, Employees' Cleanliness 5.

FOODS 30—Conditions 10—Storage 10, Handling 5, Cleanliness 5.

GARBAGE RECEPTACLES 15—Adequate 5, Location 5, Condition 5—Total 100.

Score for Equipment.....; multiplied by 1.....

Score for Methods.....; multiplied by 2.....

Total to be divided by 3.....

Final Score.....

REMARKS. (To cover such unusual conditions as sleeping accommodations, or the presence of domestic animals in or about work room, etc.).....

## MILK TEST FOR RETAIL DAIRIES, JULY 1914

	BACTERIA	*B.F.	*SP.GR.	*T.S.
White Pine Creamery (pasteurized)	6,000	4.6	1.0325	13.8
Biltmore, Certified	7,500	5.0	1.033	14.4
Biltmore	8,600	5.2	1.033	14.7
Violet	8,800	5.0	1.032	14.2
Fenner Farm	15,000	4.8	1.0335	14.3
Oak Grove	26,000	5.0	1.0302	13.6
Sevier	27,000	4.4	1.032	13.4
Middlebrook	30,000	5.0	1.032	14.7
Edgewood	30,000	5.4	1.034	13.8
Melrose	35,000	4.8	1.033	14.2
Locust Grove	37,000	5.0	1.0325	14.3
Anandale	42,000	4.2	1.030	12.8
Oak Springs	43,000	4.0	1.0305	12.2
Bud Whitmore	46,000	5.0	1.032	14.2
Wildwood	53,000	4.0	1.033	13.3
Sunset	75,000	4.8	1.0325	14.0
Pleasant Hill	85,000	5.0	1.031	13.9
Dryman Mountain	85,000	4.0	1.0319	12.9
Laurel Spring	87,000	4.2	1.032	13.2
Mountain Range	87,000	4.2	1.030	13.2
Garrison Bros.	112,000	4.8	1.052	13.8

## MILK TEST FOR WHOLESALE DAIRIES, JULY, 1914

	BACTERIA	*B.F.	†SP.GR.	°T.S.
McCall	20,000	4.5	1.030	13.2
Nettles	25,000	5.0	1.033	14.4
New Bridge	27,000	4.6	1.033	14.0
Scarborough	30,000	4.8	1.032	13.8
Emma Farm	35,000	4.0	1.0335	13.3
Carter Bros.	36,000	4.6	1.031	13.4
Swain	37,000	4.2	1.0325	13.2
Stony Knob	40,000	4.6	1.032	13.6
Calloway	42,000	3.7	1.031	12.4
I. V. Baird	48,000	3.6	1.034	13.0
H. L. Ray	55,000	3.8	1.032	12.7
W. A. Baird	65,000	4.0	1.034	13.5
Hill Farm (Cream)	77,000	21% Cream		
Sam Griffin	79,000	4.6	1.033	13.9
Charles Wilson	90,000	3.8	1.034	13.2
Swannanoa	93,000	5.0	1.033	14.4
O. Baird	95,000	5.0	1.032	14.2
Hunsucker	100,000	5.0	1.037	14.4

All Dairy Herds are tuberculin tested annually.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep milk clean.

An average count of over 50,000 per unit would indicate careless methods.

\*Butter fat (legal minimum 3.25); †Specific gravity (legal minimum 1.029); °Total solids (legal minimum 11.75) indicate the chemical composition of the milk. Samples below standard would indicate adulteration.



# BULLETIN

OF THE

HEALTH DEPARTMENT  
ASHEVILLE, N. C.

No. 44

Entered as second-class matter, September 28, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

Sept. 1914



The Mountain Girt City, the queen of "The Land of the Sky," where there is found an unexcelled climate; pure water; certified milk; tubercular tested cows; closely inspected dairies; pure food laws; abattoir, meat and restaurant inspection; flushed streets; swimming pool, alive with many attractions for the seeker of health and pleasure.

Proud of her national reputation of taking the initiative in public sanitation, she bids you welcome.

## Health Department City of Asheville

### BOARD OF HEALTH

MAYOR J. E. RANKIN, Chairman.

B. M. LEE, City Engineer.

C. W. BROWN, Chairman Finance Committee,  
B. of A.

W. R. PATTERSON, Chairman Sanitary Com-  
mittee, B. of A.

DR. C. V. REYNOLDS.

DR. E. B. GLENN.

DR. W. L. DUNN.

DR. A. W. CALLOWAY.

### SANITARY COMMITTEE BOARD OF ALDERMEN

W. R. PATTERSON, Chairman.

R. L. FRANCIS.

C. W. BROWN.

### EXECUTIVE OFFICERS

C. V. REYNOLDS, M. D., Health Officer,  
Phones: Residence, 174; Office 15.

W. H. BIRD, Sanitary Inspector, Phones: Resi-  
dence, 374; Office, 152; Stable, 294.

L. M. MCCORMICK, Meat and Milk Inspector,  
Chemist and Bacteriologist, Phone 152.

ERNEST ISRAEL, Sewer and Plumbing Inspector.

W. FRANCIS, Water Superintendent.

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**Population** { White - 15,000 } **20,000**  
                  { Colored - 5,000 }

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### GARBAGE REGULATIONS

Asheville, through her Board of Health, has been making every effort to maintain her high standard in Health Regulations. Every year she makes advancement and with renewed energy she sets about to do her work well. In this issue we are printing the garbage laws and by the aid of her citizens, she will become an enviable city. Please read the following ordinance carefully and prepare *now* for the garbage and trash wagons.

*The Board of Aldermen of the city of Asheville do ordain.*

SECTION 1. That the ordinance passed on its first reading September 18th, 1914, relating to receptacles for garbage, etc., be and the same is hereby amended so as to read as follows:

SECTION 1. That it is hereby made the duty of the owner or occupant of any

building in the city of Asheville used as a residence, store house, restaurant, boarding house, tenement house, lodging house, hotel or business house, to provide and keep for every such building as many suitable receptacles as may be necessary for the purposes herein mentioned, which receptacles shall be provided with close-fitting covers and handles and be not more than eighteen inches in diameter and thirty inches in depth, in which receptacles shall be deposited such trash, waste and garbage as shall accumulate or be upon said premises as the same accumulates; *provided*, combustible trash and waste matter shall be kept separate from garbage.

SEC. 2. That all of said receptacles shall be kept in some conveniently accessible place upon the premises which shall be designated by the Sanitary Inspector; *provided*, that the occupants of all buildings within the business district of said city shall place such receptacles as contain waste, trash or garbage upon the sidewalk adjoining their premises each day (Sundays excepted) before 8 o'clock A.M.

SEC. 3. That it shall be unlawful for any person, firm or corporation to haul or carry any garbage or night soil on any street within the city of Asheville, except it be in metal-covered vessels or water-tight metal wagons with tight-fitting metal tops, approved by the Board of Health and kept in a clean and sanitary condition at all times.

SEC. 4. That it shall be unlawful for any owner, tenant or agent in control of any lot or premises within the city of Asheville to permit to remain thereon any

empty bottles, empty cans or other receptacles which may gather and hold water.

SEC. 5. That it shall be unlawful for any person, firm or corporation to keep or maintain on his or its premises any growing vegetation of such kind or nature as to be a menace to the public health, or to fill any land with or dump upon any land within the city of Asheville, garbage, dead animals, decaying vegetable or animal matter or any offensive material, nor shall any of the aforesaid offensive materials be buried within the city, but shall be disposed of as provided by law.

SEC. 6. That no person, firm or corporation shall engage in the business of carrying manure, swill, garbage, night-soil or other offensive or noxious substances through the streets of the city of Asheville, without a permit from the Board of Health. No cart or other vehicle used for the purposes of hauling any of said substances shall be allowed to stand unnecessarily upon the street, nor shall any unreasonable length of time be consumed in passing through the streets, in loading or unloading. Such carts or other vehicles and all implements used in connection therewith, shall be kept in an inoffensive and sanitary condition. All carts, vehicles or other containers used in moving the above mentioned offensive or noxious substances shall be strong and tight, and sufficiently high to prevent the spilling or leaking of contents.

SEC. 7. All garbage, refuse, or other waste material shall be collected and removed from private residences promptly, thoroughly and in a cleanly manner at least once a week from November 1st to

April 30th inclusive, and at least twice a week from May 1st to October 31st, and from hotels, restaurants, meat markets rendering plants and fish-dressing establishments daily.

SEC. 8. That any person, firm or corporation violating any of the provisions of this ordinance shall, upon conviction, be subject to a penalty of \$50.00 for each and every such offense.

SEC. 9. That the foregoing ordinance shall be in force and effect from and after the date of its final passage.

I move the adoption of the foregoing amendment.

Alderman.

Approved as to form, Sept. 25th, 1914.

### CANS

You will notice the size and depth of the cans for the collection of garbage and other waste products. Telephone 152 and they will inform you where these cans can be purchased. It is highly essential that you purchase your cans now in order that you may be able to comply with this law and have your garbage properly taken care of. It will not cost you any more to secure the cans promptly and it certainly will inconvenience you and the Health Department by your inattention to this appeal.

SEC. 501. That no swill, distillery swill, slops, distillery slops, pot ale, garbage or kitchen waste or refuse, shall be carried through the streets of the city of Asheville, save in water-tight barrels or boxes provided with wooden or metallic tops or covers; and no such material shall



be carried in any cart, wagon or other vehicles in which milk, cream or buttermilk is carried, or from which milk, cream or buttermilk is sold; and any person violating any of the provisions of this section shall be subject to a penalty of twenty dollars for each and every such offense.

### SANITARY TAX

SECTION 1. That all improved property in the city of Asheville shall be charged annually with the following assessments which are hereby levied for the purpose of defraying the cost of collecting, removing and disposing of all garbage, night soil, and all other waste and decaying matter found upon such property, to-wit: Upon all property upon which there is a building used exclusively or principally as a residence there shall be levied and collected as other taxes the following amounts based upon the valuation of said improved property for the purposes of *ad valorem* taxes, viz:

ASSESSED VALUATION	ANNUAL ASSESSMENT
\$ 500.00 or less.....	\$ .75
500.00 to \$1,000.00.....	1.00
1,000.00 to 1,500.00.....	1.25
1,500.00 to 2,000.00.....	1.50
2,000.00 to 2,500.00.....	1.75
2,500.00 to 3,000.00.....	2.00
3,000.00 to 5,000.00.....	2.50
5,000.00 and over.....	3.00

Upon all boarding houses with less than 10 rooms the foregoing rates shall be charged, but upon all boarding houses with 10 or more rooms, the following assessments are hereby levied, viz:

10 to 20 rooms.....	\$ 4.00 annually
20 to 30 rooms.....	6.00 annually
30 to 40 rooms.....	8.00 annually

Upon all hotels classified by the Board of Aldermen the following assessments are hereby levied, viz:

Class A.....	\$24.00 annually
Class B.....	20.00 annually
Class C.....	16.00 annually
Class D.....	12.00 annually
Class E.....	10.00 annually
Class F.....	8.00 annually

Upon all Business Houses within the fire limits of the city of Asheville there is hereby levied the sum of \$3.00 annually per 25 feet front of said building, and at the same pro rata rate for each front foot thereof, and \$2.00 per 25 feet front upon all such buildings outside said fire limits, and at the same pro rata rate for each front foot thereof.

SEC. 2. That the City Auditor, or other person, in making up the tax books of the city of Asheville annually, shall include in the total amounts levied against all property subject to the provisions of this ordinance the amounts hereinbefore stipulated, and the same shall be collected by the Tax Collector of said city in the same manner as other taxes.

SEC. 3. That all ordinances and clauses of ordinances in conflict with any of the provisions of this ordinance be and the same are hereby repealed.

SEC. 4. That the foregoing ordinance shall be in force and effect from and after the date of its final passage.

### THE BOARD OF HEALTH OF BUNCOMBE COUNTY TO BE CONGRATULATED

It is with pride and pleasure that we give as much space as possible to a few of

the rules regulating county sanitation. Asheville stands among the foremost cities of the country in sanitation and requests for her laws are received most every day—of this she is justly proud, but prouder yet is she that she is situated in Buncombe County, a county who will, in the future, be a leader in county sanitation. We are fortunate in having such an efficient County Health Board and with Dr. D. E. Sevier as her Health Officer, we cannot only expect co-operation of the city laws but a rigid enforcement of county regulations.

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#### RULES AND REGULATIONS OF THE BOARD OF HEALTH OF BUN- COMBE COUNTY

That the Board of Health of Buncombe County at a meeting September 14, 1914, did enact the following rules and regulations:

SECTION 1. The Buncombe County Board of Health do enact, that it shall be unlawful for any person or persons, firm or corporation to erect, establish or maintain a hog pen or hog lot within two hundred feet of any public road, public building, residence, or water supply, or incorporate city or town; any person or persons violating this ordinance shall be guilty of a misdemeanor, and on conviction shall be fined not less than Five Dollars or more than Twenty-five Dollars or imprisoned not less than ten days nor more than thirty days for such offense, in the discretion of the Court. This act shall be in force from and after its ratification.

SEC. 2. The Buncombe County Board of Health do enact, that it shall be unlawful for any person or persons, firm or corporation to erect, establish, or maintain a surface closet within one hundred yards of any drinking water supply, such as a well, spring or branch, or dwelling, school house or church unless same has been located or approved by the County Health Officer and found to be free from danger. Any person or persons violating this ordinance shall be guilty of a misdemeanor and on conviction shall be fined not less than Ten Dollars or more than Twenty-five Dollars for such offense, and imprisoned not less than ten days or more than thirty days in the discretion of the Court. This act shall be in force from and after its ratification.

SEC. 3. The Buncombe County Board of Health do enact, that it shall be unlawful for any person or persons, firm or corporation to kill, butcher or slaughter any animal or fowl within one hundred feet of any public road, public building or residence, or water supply for drinking purposes, or within one hundred feet of any city or incorporate town. Any person violating this provision shall be guilty of a misdemeanor and on conviction shall be fined not less than Ten Dollars or more than Twenty-five Dollars for such offense in the discretion of the Court. This act shall not apply to persons killing fowls for their own table use. This act shall be enforced from and after its ratification.

SEC. 4. The Buncombe County Board of Health do enact, that it shall be unlawful for any person or persons, firm or corporation to store, scatter or use in any

manner stable manure or any decomposing vegetable matter without the same being chemically treated under the supervision of the County Health Officer, within five miles of the city of Asheville, North Carolina. Any person violating this provision shall be guilty of a misdemeanor and on conviction shall be fined not less than Five Dollars or more than Twenty-five Dollars for such offense, or imprisoned not less than ten days or more than thirty days in the discretion of the Court. This act shall be in force from and after its ratification.

SEC. 5. The Buncombe County Board of Health do enact, that it shall be unlawful for any person or persons, firm or corporation to place, deposit or throw any and all kinds of garbage, such as tin cans, papers, trash, street sweepings or any other kind of garbage within one hundred feet of the public highways. Any person so violating this provision shall be guilty of a misdemeanor and on conviction shall be fined not less than Ten Dollars or more than Twenty-five Dollars, or imprisoned not less than ten days or more than thirty days in the discretion of the Court. This act shall be in force from and after its ratification.

SEC. 6. The Buncombe County Board of Health do enact, that it shall be unlawful for any person or persons, firm or corporation to place, deposit or keep any kinds of fertilizers within three hundred feet of any dwelling, school building, or place of worship. Any person so violating this provision shall be guilty of a misdemeanor and on conviction shall be fined not less than Ten Dollars or more than Twenty-five Dollars or imprisoned not less than ten days or more than thirty

days in the discretion of the Court. This act shall be in force from and after its ratification.

SEC. 7. The Buncombe County Board of Health do enact, that it shall be unlawful for any person or persons, firm or corporation to allow or permit the sewage from their premises to flow uncovered or unprotected within five hundred feet of any public road, public building, residence or water supply for drinking purposes, and the same must empty into a cess pool or running water sufficient to receive such sewage. Any person violating this ordinance, ten days after receiving official notice, shall be guilty of a misdemeanor, and on conviction shall be fined not less than Twenty-five Dollars nor more than Fifty Dollars or imprisoned not less than ten days nor more than thirty days for such offense in the discretion of the Court. This act is in force from and after its ratification, or passage.

SEC. 8. The Buncombe County Board of Health do enact, that it shall be unlawful for any person or persons, firm or corporation to store, scatter or use in any manner stable manure or any decomposing vegetable matter without the same being chemically treated under the supervision of the County Health Officer within five miles of the city of Asheville, N. C. Anyone violating this ordinance shall be guilty of a misdemeanor and on conviction shall be fined not less than Five Dollars or more than Twenty-five Dollars or imprisoned not less than ten days or more than thirty days for each offense in the discretion of the Court. This act shall be in force from and after its ratification.



### STANDING OF ASHEVILLE RESTAURANTS AS SCORED BY U.S. STANDARDS

	EQUIPMENT	METHODS	FINAL SCORE
Langren Grill.....	99	96	97
Candy Kitchen.....	97	97	97
Yuneda Dairy Lunch.....	88	91	90
Pisgah Cafe.....	91	88	89
Woman's Exchange.....	92	85	87 1/3
Railroad Restaurant.....	90	83	85 1/3
Savoy Cafe.....	82	85	85 1/3
Crystal Cafetarian.....	91	88	85
Crystal Dairy Lunch.....	80	85	83 1/3
New York Lunch.....	82	84	83 1/3
Southern Restaurant.....	80	80	80
Central Cafe.....	76	82	80
Baltimore Cafe.....	86	77	80
Rea Cafe.....	85	72	76 1/3
California Lunch Room.....	79	74	75 2/3
Busy Bee.....	80	73	75 1/3
United States Cafe.....	80	72 1/2	75
Brysons Boarding and Lunch.....	64 1/2	69	67 1/2
Dixie Cafe.....	67	54 1/2	58 2/3
Farmers Ready Lunch.....	57	54	53 1/3
Y.M.I. Restaurant (colored).....	56	60 1/2	59
Crescent (colored).....	58	50 1/2	53
Pearson Quick Lunch (colored).....	46	47 1/2	47

#### POINTS ALLOWED BY GOVERNMENT SCORE CARD—IN DETAIL

**EQUIPMENT**—CONSTRUCTION 10—Floors and Drainage 7, Walls 2, Ceilings 1.

ARRANGEMENT 7—Proper Rooms 4, Convenience 3, Light 5, Ventilation 5, Screens 5, Cellar 3.

PLUMBING 20—Kind, quality, location and condition—Water Closets 10, Sinks 10.

EQUIPMENT 25—Kind, quality, arrangement—Ice Boxes 15, Tables 5, Utensils 5.

WATER FOR CLEANING 20—Hot 15, Cold 5—Total 100.

**METHODS**—CLEANLINESS 20—Floors 5, Walls 3, Ceilings 1, Doors 1, Windows 1,

Good Order 1, Free from Odor 2, Freedom from Flies 6.

EQUIPMENT (CLEANLINESS) 30—Ice Boxes 10, Tables 5, Sinks 5, Utensils 10, Employees' Cleanliness 5.

FOODS 30—Conditions 10—Storage 10, Handling 5, Cleanliness 5.

GARBAGE RECEPTACLES 15—Adequate 5, Location 5, Condition 5—Total 100.

Score for Equipment.....; multiplied by 1.....

Score for Methods.....; multiplied by 2.....

Total to be divided by 3.....

Final Score.....

REMARKS. (To cover such unusual conditions as sleeping accommodations, or the presence of domestic animals in or about work room, etc.).....

## MILK TEST FOR RETAIL DAIRIES, AUGUST, 1914

	BACTERIA	*B.F.	*SP.GR.	*T.S.
Biltmore, Certified.....	6,000	5.2	1.033	14.2
Biltmore.....	8,000	5.2	1.033	14.2
White Pine Creamery (pasteurized)	8,500	4.4	1.033	14.
Violet.....	12,000	5.0	1.033	14.4
Fenner Farm.....	20,000	4.0	1.033	14.3
Melrose.....	23,000	4.2	1.032	13.2
Oak Grove.....	23,000	4.4	1.032	13.4
Oak Springs.....	25,000	4.4	1.032	13.4
Sunset.....	36,000	4.2	1.0325	13.2
Bud Whitmore.....	38,000	4.2	1.0325	13.2
Sevier.....	38,000	5.0	1.033	14.4
Mountain Range.....	50,000	5.0	1.033	14.3
Locust Grove.....	53,000	4.6	1.0325	13.8
Pleasant Hill.....	60,000	4.6	1.032	12.7
Middlebrook.....	60,000	5.2	1.032	14.2
Wildwood.....	70,000	5.0	1.032	14.4
Laurel Spring.....	73,000	4.2	1.030	13.2
Edgewood.....	73,000	4.6	1.0325	13.8
Dryman Mountain.....	53,000	4.2	1.033	14.4
Anandale.....	90,000	5.0	1.032	14.2
Fairview.....	100,000	4.0	1.033	14.4
Forest Hill.....	100,000	4.2	1.0325	13.2

## MILK TEST FOR WHOLESALE DAIRIES, AUGUST, 1914

	BACTERIA	*B.F.	†SP.GR.	°T.S.
Nettles.....	22,000	5.2	1.033	14.7
Ed McCall.....	25,000	5.2	1.033	14.4
H. L. Ray.....	37,000	4.4	1.032	13.4
Carter Bros.....	43,000	4.8	1.052	13.8
I. V. Baird.....	47,000	4.6	1.032	13.6
Hunsucker.....	47,000	5.0	1.032	14.2
W. A. Baird.....	48,000	4.4	1.032	13.4
Stony Knob.....	50,000	4.6	1.0325	13.8
Scarborough.....	55,000	5.0	1.033	14.4
D. Calloway.....	57,000	5.0	1.033	14.4
Charles Wilson.....	58,000	5.0	1.033	14.3
Swain.....	60,000	4.8	1.0335	15.3
Swannanoa.....	61,000	5.0	1.032	14.7
New Bridge.....	62,000	4.6	1.0325	14.3
H. O. Baird.....	63,000	5.	1.033	14.2
Hill Farm (Cream).....	65,000	17% Cream		
Stevens & Moser.....	70,000	4.6	1.031	13.4
Elmer Carter.....	72,000	4.4	1.0332	13.2
Sam Griffin.....	73,000	4.4	1.032	13.4
Garrison Brothers.....	100,000	4.4	1.032	13.4
Jeter Greenweed (Cream).....	400,000	16% Cream		

All Dairy Herds are tuberculin tested annually.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep milk clean.

An average count of over 50,000 per unit would indicate careless methods.

\*Butter fat (legal minimum 3.25); †Specific gravity (legal minimum 1.029); °Total solids (legal minimum 11.75) indicate the chemical composition of the milk. Samples below standard would indicate adulteration.

# BULLETIN

OF THE

## HEALTH DEPARTMENT ASHEVILLE, N. C.

No. 45

Entered as second-class matter, September 28, 1910, at the Post Office,  
Asheville, N. C., under Act of July 16, 1894.

Oct. 1914



The Mountain Girt City, the queen of "The Land of the Sky," where there is found an unexcelled climate; pure water; certified milk; tubercular tested cows; closely inspected dairies; pure food laws; abattoir, meat and restaurant inspection; flushed streets; swimming pool, alive with many attractions for the seeker of health and pleasure.

Proud of her national reputation of taking the initiative in public sanitation, she bids you welcome.



## Health Department City of Asheville

### BOARD OF HEALTH

MAYOR J. E. RANKIN, Chairman.  
 B. M. LEE, City Engineer.  
 C. W. BROWN, Chairman Finance Committee,  
 B. of A.  
 W. R. PATTERSON, Chairman Sanitary Com-  
 mittee, B. of A.  
 DR. C. V. REYNOLDS. DR. E. B. GLENN.  
 DR. W. L. DUNN. DR. A. W. CALLOWAY.

### SANITARY COMMITTEE BOARD OF ALDERMEN

W. R. PATTERSON, Chairman.  
 R. L. FRANCIS. C. W. BROWN.

### EXECUTIVE OFFICERS

C. V. REYNOLDS, M. D., Health Officer,  
 Phones: Residence, 174; Office 15.  
 W. H. BIRD, Sanitary Inspector, Phones: Resi-  
 dence, 374; Office, 152; Stable, 294.  
 L. M. McCORMICK, Meat and Milk Inspector,  
 Chemist and Bacteriologist, Phone 152.  
 ERNEST ISRAEL, Sewer and Plumbing Inspector.  
 W. FRANCIS, Water Superintendent.

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**Population** { White - 15,000 } **20,000**  
                   { Colored - 5,000 }

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### SCHOOL INSPECTION

This is the season of the year that we are visited by sporadic-endemic or epidemic cases of infections, communicable or contagious diseases, all of which are preventible, and can be limited to a few in number under a well regulated system of school inspection, followed by a close supervision of the home quarantine.

It is regarded by most observers that contagious diseases are not most frequently communicated by patients housed, or with clinical symptoms, for they are known carriers—placarded carriers, marked, isolated and shunned individuals—from whom all visitors absent themselves.

It is those cases without clinical symptoms and unknown as carriers that are sources of greatest danger.

Again there are a certain number of

mild or missed cases that play a great part in the spread of disease.

After many years of close study, seeking the etiology (cause) of contagious diseases, and witnessing the appalling death rate caused by our lack of knowledge, we have, through city quarantine—household quarantine and now, room quarantine of the individual and nurse only, found that we have only one factor under our supervision, in the spread of disease, and that factor is the least dangerous, for he is a known factor.

We do know the source of greatest danger to public health, namely, the carriers and missed cases. Where are we to find these carriers and missed cases? The answer is forthcoming—where those the most susceptible are to be found—the school children.

Surely the medical men have done their part—they have found the cause and located the source from which it is most often communicated.

Whose duty and privilege should it be to see to it that these sources of trouble are abated?—the School Board.

When a disease dangerous to public health occurs in the public schools, it is the Health Officer's duty to see that the child affected and other children in the same house are properly quarantined and the room occupied fumigated—should it stop there? No! the teacher saw this placarded child. Where did this marked child get this dreaded disease?

If you will search you will find the carrier or missed case—the source of greatest harm.

Is it not wisdom to prevent rather than fight disease? Preventive medicine and

preservation of health is the brightest star in medical researcher's crown and much has been accomplished at this time—much more than is being used.

Is it not an insult to say that we will have to abide our time and through education we hope to win?

Too often we close the schools on account of the prevalence of contagious diseases—preventable diseases, thereby causing hundreds of children to suffer the loss of time and education, all on account of the few suffering from preventable diseases.

Where is the economy in closing the schools when the overhead charges in the form of superintendents', principals' and teachers' salaries, interest charges, etc., are going on "whether school keeps or not?"

It seems to me that under proper conditions, it would be far better to continue school rather than dismiss the children and increase the source of danger.

If the schools should have a whole time medical inspector who would eliminate the foci of infection, it would be far better wisdom to continue the schools in order that the children could be more closely watched, and immediately cared for, eliminating infected or suspicious cases.

Medical works are full of alarming statistics of the various sequellæ of preventable diseases, such as diseased eyes, frequently loss of sight—diseased ears, abscesses, mastoid abscesses, frequent loss of hearing, diseases of the heart, kidneys, etc.

I sometimes think that death from these preventable diseases is far better than the horrible sequellæ that follow in their path.

This is only one small phase of the necessity of Asheville having a medical school-inspector and may the time hasten when we can make this very much delayed advancement.

Remember the responsibility lies with the School Board, and upon reflection it would be well to remember that the children are our wards and have not reached the age of discrimination and can't realize the danger to themselves and the imposition they inflict upon others.

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## VACCINATION OF SCHOOL CHILDREN

### VACCINATE AND PREVENT

Sec. 478. Bourne's Asheville Code. That immediately upon the appearance of a case of smallpox in the city of Asheville, every adult person therein who has not had smallpox or been successfully vaccinated within five years previous, shall be immediately vaccinated, and every parent, guardian or master of every minor residing within the limits of said city who has not had smallpox or been successfully vaccinated shall cause such minor to be vaccinated; provided, however, in cases where a regularly licensed physician of this State furnished a certificate to the effect that vaccination would be dangerous in any case, such person may be excused from complying with the provisions of this section; and any person failing or neglecting to comply with the provisions of this section shall be subject to a penalty of fifty dollars for each and every such offense.

AMENDMENT PASSED DEC. 16, 1910

Sec. 480A. That all teachers, instructors and persons connected with any

school in the city of Asheville and all persons attending any such school shall be vaccinated before entering or being admitted to such school, or building in which such school is established, and shall thereafter be successfully vaccinated whenever, in the opinion of the Health Officer of said city of Asheville, the health of the citizens of Asheville or the inmates of such school shall require such vaccination, subject, however, to the proviso contained in section 478 of Bourne's Asheville Code.

#### DANGEROUS DISEASES

Sec. 470. That the following diseases are declared to be communicable and dangerous to the public health, viz: smallpox (varialo, varioloid), cholera (Asiatic or epidemic), scarlet fever (scarlatina, scarlet rash), measles, pulmonary tuberculosis, diphtheria (diphtheria croup, diphtheriatic sore throat), typhoid fever, typhus fever, yellow fever, spotted fever (cerebro spinal meningitis), epidemic or dysentery, and whooping cough.

#### TO THE HOUSEHOLDER

Sec. 471. That when any householder knows that any person within his family or household has a communicable disease, dangerous to public health, he shall, within twenty-four hours, report the same to the Health Officer of the city, giving the street number or location of the house; and any such householder failing or neglecting to comply with the provisions of this section shall be subject to a penalty of twenty-five dollars for each and every such offense.

#### REMOVAL OF PATIENTS

Sec. 473. That no person shall, within the limits of this city, unless with the permission and under the direction of the Health Officer thereof, carry or remove from one building to another any patient affected with any communicable disease dangerous to the public health; nor shall any person, by any exposure of any indi-

vidual so affected, or of the body of such individual, or of any article capable of conveying contagion or infection, or by any negligent act connected with the care or custody thereof, or by a needless exposure of himself or herself, cause or contribute to the spread of disease from any such individual or dead body; and any person violating any of the provisions of this section shall be subject to a penalty of twenty-five dollars for each and every such offense.

#### NOTICE TO INMATES OF HOUSES UNDER QUARANTINE

Sec. 476. That all members of any household in which smallpox, diphtheria, scarlet fever or measles exists, shall abstain from attending places of public amusement, worship or education, and from visiting other private houses except on express permission of the Health Officer; and school children quarantined and kept from school on account of any such disease shall not return to school for two weeks after such quarantine has been raised; and any such person violating any of the provisions of this section shall be subject to a penalty of twenty-five dollars for each and every such offense.

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### Extracts from Quarantine Laws Passed by Joint Board of Health Nov. 21, 1913

#### INTERFERENCE WITH WARNING SIGNS

Sec. 10. That no person shall, without the written consent of the Health Officer, handle, deface, obliterate, remove, or cancel any warning sign displayed in accordance with these regulations.

#### MANAGEMENT OF SUSPECTED CASES

Sec. 13. That any person who is suffering from symptoms that so resemble those of diphtheria, scarlet fever, measles, whooping cough, chickenpox, smallpox, acute anterior poliomyelitis, epidemic



cerebro-spinal meningitis, or typhoid fever, that they cannot be distinguished therefrom with reasonable certainty, shall be regarded for the purpose of these regulations as suffering from the disease the symptoms of which appear to represent; provided, however, that no warning signs shall be displayed except in cases definitely diagnosed as one of the above acute infectious diseases.

#### DURATION OF QUARANTINE

Sec. 14. The duration of quarantine for measles shall be fourteen days from the appearance of the rash or longer, in the discretion of the Health Officer, if a discharge from the nose or ears, or the catarrhal condition of the throat continues.

#### DIPHTHERIA

A. A person suffering from diphtheria shall not be released from quarantine until two successive swabs from the throat, forty-eight hours intervening, shall be found free from the diphtheria bacilli. Such swabs to have been incubated for twenty-four hours, the incubation and the bacteriological examination to have been done in the laboratory of the Health Department. Swabs presented for examination for release must be taken by a physician or by some one especially authorized by the Health Officer.

#### SCARLET FEVER

B. The duration of quarantine for scarlet fever shall be six weeks from the appearance of the rash and longer, in the discretion of the Health Officer, if there continues to be a discharge from the nose or ears, or until desquamation is complete.

#### SMALLPOX

C. The duration of quarantine for smallpox shall be until desquamation is completed, to the satisfaction of the Health Officer.

#### EPIDEMIC CEREBRO-SPINAL MENINGITIS

D. The duration of quarantine for epidemic cerebro-spinal meningitis shall be

six weeks from the appearance of the disease.

#### ACUTE ANTERIOR POLIOMYELITIS OR INFANTILE PARALYSIS

E. The duration of quarantine for acute anterior poliomyelitis shall be six weeks from the beginning of the disease.

#### ISOLATION OR QUARANTINE

Sec. 15. Isolation or quarantine is defined to be the complete separation of the persons sick with a communicable disease as prescribed herein and by law, and those attendant upon such person, from all other persons whomsoever.

#### DIPHTHERIA

Sec. 19. All school children living or resident in the house at the time the case is discovered, may, after two cultures from the throat shows negative, 48 hours intervening, after incubation for twelve hours, and examination by the City Bacteriologist, and after proper disinfection of the entire surface of the body and clothing, be allowed to remove to some other house, and conduct themselves in regard to attendance upon school, assemblies and other ways as if they had not been exposed to diphtheria, provided, that children under fifteen years so exposed shall have been immunized against diphtheria by a proper dose of diphtheria anti-toxin, provided that in case no immunizing dose of anti-toxin is given, the child shall not return to school until two weeks after the last exposure and the throat shows two negative cultures, forty-eight hours intervening. The child who has been sick with diphtheria may return to school immediately after the quarantine is raised.

#### DIPHTHERIA CARRIERS

Sec. 20. If any person is found by proper laboratory examination to harbor in his or her throat or nose or ears the diphtheria bacillus and who has had no sore throat and has not been clinically ill with diphtheria, he or she shall be considered a carrier of diphtheria and the



house shall be placarded with the warning sign of diphtheria, except that the warning sign shall have just below the word "diphtheria" the word "carrier" in small letters, and the said diphtheria carrier shall be required to stay on and not leave the premises, and not go within twenty-five feet of any other person, save members of his or her own family. And the other members of such family and other persons resident upon the premises at the time shall govern themselves and be subject to the rules laid down in cases of diphtheria.

#### WITHDRAWAL OF CHILDREN FROM SCHOOL

Sec. 21. In case a physician suspects a sore throat to be diphtheria it shall be his duty to advise the parents of the child of his suspicion and he shall notify the parents to isolate the child and such child shall be isolated as provided in cases of diphtheria and all other children resident on the premises shall remain thereupon as required in cases of diphtheria, pending a bacteriological diagnosis of the disease by the City Bacteriologist and it shall be the duty of the attending physician in such cases to submit a swab of the suspected throat for such purposes and if, upon examination, such swab shows positive for diphtheria bacilli the case shall be considered diphtheria, if such examination shows negative for diphtheria bacilli and the case is clinically diphtheria, it shall be regarded as diphtheria.

#### SCARLET FEVER

Sec. 22. That a person with a rash reasonably suspected to be scarlet fever shall be isolated from the other members of the family, and other children of the household or resident in the house shall be required to remain on the premises and all other rules and regulations in regard to room quarantine shall be in full force and effect, until such time as the attending physician shall become satisfied that the case is not scarlet fever. Should the case prove to be scarlet fever the attending

physician shall immediately notify the Health Officer as required by law and room quarantine shall be established.

#### WHEN CHILDREN MAY RETURN TO SCHOOL

Sec. 23. The child who has been ill with scarlet fever and the other children of the household or resident therein, will be allowed to return to school as soon as the quarantine is raised, provided the attending physician will furnish a written statement to the Health Officer that to the best of his knowledge and belief a strict room quarantine according to the rules of this ordinance, has been kept during the entire period the quarantine has been in force. Otherwise the quarantine shall remain in full force and effect for two weeks longer.

#### QUARANTINE

Measles, fourteen days; scarlet fever, six weeks; smallpox, discretion of Health Officer; epidemic cerebro-spinal meningitis, six weeks; acute anterior poliomyelitis, six weeks; diphtheria, until two throat examinations by bacterial methods show negative.

#### A FEW REMINDERS

Thousands die every year from diseases carried by the fly, yet we still look upon it as an annoyance to be tolerated, not as a death dealer to be exterminated.

Begin next year's fly campaign now.

Swat the autumn fly; it prevents thousands next year.

The fly disposed of late in the fall would probably have been the mother of several millions next summer.

A competent authority has reported that as many as five thousand germs of tuberculosis may be contained in a single fly speck and flies have been known to deposit a speck every four and one-half minutes.

## STANDING ASHEVILLE RESTAURANTS AS SCORED BY U. S. STANDARDS

	EQUIPMENT	METHODS	FINAL SCORE
Y.W.C.A. Lunch Room.....	99	97	97 $\frac{2}{3}$
Candy Kitchen.....	97	97	97
Langren Grill.....	99	96	97
Yuneda Dairy Lunch.....	91	93	92 $\frac{1}{2}$
Pisgah Cafe.....	94	90	91 $\frac{1}{3}$
Woman's Exchange.....	90	90	90
Pisgah Cafe No. 2.....	91	88	89
Crystal Dairy Lunch.....	80	90	86 $\frac{1}{3}$
Savoy Cafe.....	82	87	85 $\frac{1}{3}$
Railroad Restaurant.....	90	83	85 $\frac{1}{3}$
Crystal Cafetarian.....	91	82	85
New York Lunch.....	82	84	83 $\frac{1}{3}$
Central Cafe.....	76	83	80 $\frac{2}{3}$
Southern Restaurant.....	80	80	80
Baltimore Cafe.....	86	77	80
Rea Cafe.....	85	72	76 $\frac{1}{3}$
California Lunch Room.....	79	74	75 $\frac{2}{3}$
Busy Bee.....	80	73	75 $\frac{1}{3}$
United States Cafe.....	80	72 $\frac{1}{2}$	75
Bryson Boarding & Lunch.....	64 $\frac{1}{2}$	69	67 $\frac{1}{2}$
Dixie Cafe.....	67	54 $\frac{1}{2}$	58 $\frac{2}{3}$
Mills Restaurant.....	48	60	56
Farmers Ready Lunch.....	55	52 $\frac{1}{2}$	53 $\frac{1}{3}$
Bradley Restaurant.....	32	59	50
C. E. Mills.....	30	57	48
Y.M.I. Restaurant, Colored.....	56	60 $\frac{1}{2}$	59
Crescent.....	58	50 $\frac{1}{2}$	53
Pearson Quick Lunch.....	46	47 $\frac{1}{2}$	47

## POINTS ALLOWED BY GOVERNMENT SCORE CARD—IN DETAIL

EQUIPMENT—CONSTRUCTION 10—Floors and Drainage 7, Walls 2, Ceilings 1.

ARRANGEMENT 7—Proper Rooms 4, Convenience 3, Light 5, Ventilation 5, Screens 5, Cellar 3.

PLUMBING 20—Kind, quality, location and condition—Water Closets 10, Sinks 10.

EQUIPMENT 25—Kind, quality, arrangement—Ice Boxes 15, Tables 5, Utensils 5.

WATER FOR CLEANING 20—Hot 15, Cold 5—Total 100.

METHODS—CLEANLINESS 20—Floors 5, Walls 3, Ceilings 1, Doors 1, Windows 1, Good Order 1, Free from Odor 2, Freedom from Flies 6.

EQUIPMENT (CLEANLINESS) 30—Ice Boxes 10, Tables 5, Sinks 5, Utensils 10, Employees' Cleanliness 5.

FOODS 30—Conditions 10—Storage 10, Handling 5, Cleanliness 5.

GARBAGE RECEPTACLES 15—Adequate 5, Location 5, Condition 5—Total 100.

Score for Equipment.....; multiplied by 1.....

Score for Methods.....; multiplied by 2.....

Total to be divided by 3.....

Final Score.....

REMARKS. (To cover such unusual conditions as sleeping accommodations, or the presence of domestic animals in or about work room, etc.).....



## MILK TEST FOR RETAIL DAIRIES, SEPTEMBER, 1914

	BACTERIA	*B.F.	*SP.GR.	*T.S.
Biltmore Certified.....	566	5.0	1.034	15.5
Violet.....	10,000	5.0	1.0302	13.7
White Pine Creamery (Pasteurized).....	10,000	4.8	1.032	13.8
Biltmore Dairy.....	12,000	5.2	1.0327	14.4
Laurel Springs.....	19,000	5.0	1.0306	13.7
Fenner Farm.....	20,000	5.0	1.033	14.4
Melrose.....	20,000	5.2	1.0336	14.8
Oak Springs.....	20,000	5.0	1.031	13.9
Oak Grove.....	20,000	5.0	1.032	14.7
Woodbury.....	22,000	5.0	1.0306	13.7
Locust Grove.....	26,000	5.2	1.033	14.7
Middle Brook.....	28,000	5.2	1.0305	14.1
Mountain Range.....	36,000	4.8	1.034	14.4
Sevier.....	40,000	5.0	1.0308	13.8
Sunset.....	43,000	5.0	1.0325	14.2
Wildwood.....	50,000	5.0	1.032	14.2
Anandale.....	53,000	5.0	1.0306	13.7
Whittamore.....	55,000	5.0	1.033	14.5
Dryman Mountain.....	60,000	5.2	1.0293	13.8
Fairview.....	68,000	5.0	1.0298	13.7
Forest Hill Creamery.....	70,000	4.8	1.032	13.8
Pleasant Hill.....	86,000	5.0	1.031	13.9
Edgewood.....	100,000	5.2	1.032	14.4

## MILK TEST FOR WHOLESALE DAIRIES, SEPTEMBER, 1914

	BACTERIA	*B.F.	*SP.GR.	*T.S.
J. O. Baird.....	19,000	5.4	1.0335	14.8
Stony Knob.....	19,000	5.0	1.029	13.5
Chas. Wilson.....	20,000	5.0	1.0205	13.5
Swain.....	22,000	5.2	1.0302	14.0
Ed. McCall.....	30,000	5.0	1.030	13.6
H. L. Ray.....	32,000	5.0	1.032	14.2
Hunnsucker.....	35,000	4.8	1.275	13.0
Hill Farm.....	36,000	5.2	1.034	14.8
Carter Bros.....	38,000	5.4	1.033	14.9
I. V. Baird.....	40,000	4.2	1.0306	13.8
New Bridge.....	42,000	5.0	1.0335	15.0
D. Calloway.....	59,000	4.8	1.032	14.2
W. A. Baird.....	63,000	4.2	1.0306	14.0
Nettles.....	64,000	5.4	1.031	14.5
Sam Griffin.....	68,000	5.2	1.0282	13.2
Garrison Bros.....	70,000	5.4	1.0301	14.1
Elmer Carter.....	72,000	5.0	1.0306	13.9
Scarborough.....	85,000	5.4	1.0325	14.7
Stephens & Moser.....	90,000	5.0	1.031	13.8
Jeter Greenwood.....	96,000	5.8	1.0295	13.3
Swannanoa.....	100,000	5.0	1.030	13.7

All Dairy Herds are tuberculin tested annually.

The Bacterial Count by which our dairies are graded are averages of several samples taken during the month and indicate the relative care used to keep milk clean.

An average count of over 50,000 per unit would indicate careless methods.

\*Butter fat (legal minimum 3.25); †Specific gravity (legal minimum 1.029); °Total solids (legal minimum 11.75) indicate the chemical composition of the milk. Samples below standard would indicate adulteration.